SHARP SERVICE MANUAL

CODE: 00ZPAW1410S2E

PERSONAL WORD PROCESSOR

PA-W1400

MODEL PA-W1410

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SHARP CORPORATION

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The contents are subject to change without notice.

[1] General

The PA-W1400/PA-W1410 is a portable personal word processor that has the ordinary electronic typewriter (ET) functions and the text editing functions of a common word processor (WD) that can be switch selected. It has the following features:
What the PA-W1400 differs from the PA-W1410 is in the liquid crystal display panel and backlight circuit. The PA-W1410 has the backlight feature. There is a different method for the liquid crystal display unit depending on the availability of the backlight feature.

① An 80 characters x 16 lines large size screen liquid crystal display with a tilt mechanism. The backlight is adopted for the PA-W1410, while it is not used by the PA-W1400.

② Internal single floppy disk drive

③ Use of a 96-character replaceable printwheel (non-cassette type)

④ The accessory floppy disc includes the following program for sales promotion of the product.
Please print and utilize it.
The sample of print data showing as next page.

(Operation)

CODE + Power-ON

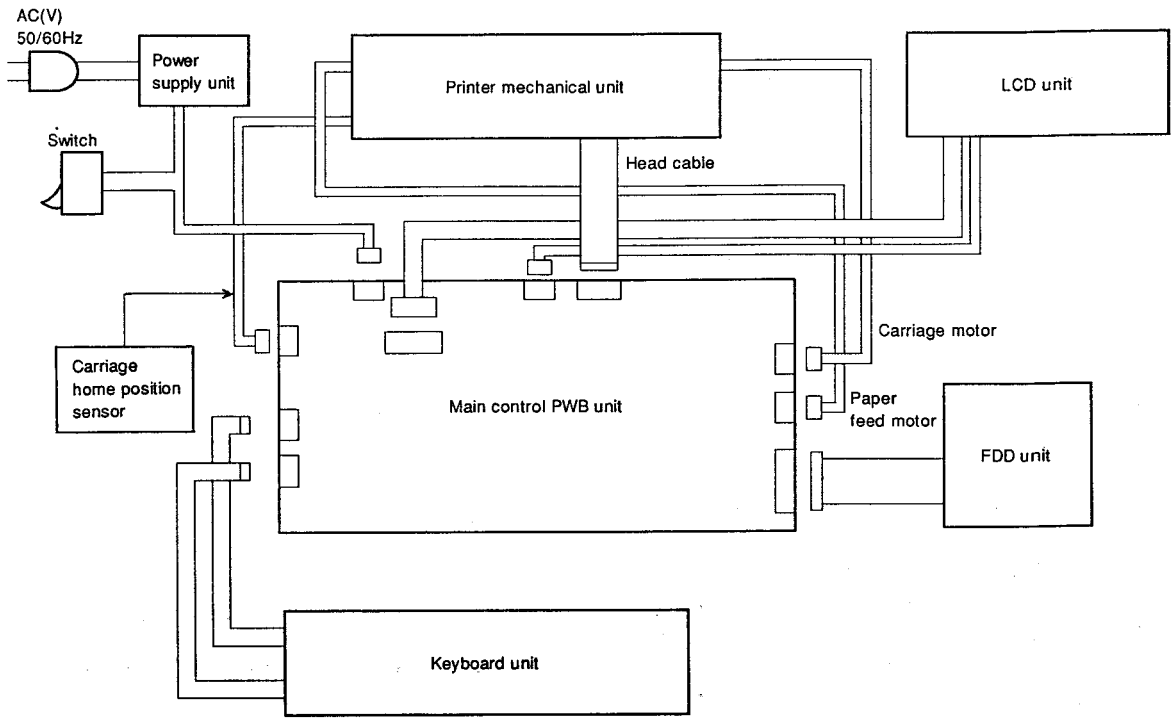
(1) Electrical circuit

The main control PWB consists of a power supply, mechanical drive, keyboard control, beeper drive, liquid display, and data storage (memory, floppy disk).

(2) Block diagram

The figure below shows the block diagram for the printer block, keyboard block, floppy disk block, power supply block, and main control PWB.

Block diagram



NOTE: The LCD unit service parts is available with it assembled in the LCD cabinet.
Since it would be probable that an open line or a contact failure may occurs at the junction between the PWB and the LCD because of corrosion, if the LCD PWB was left stored by itself for a long period of more than three month, it needs to be stored with the LCD assembled to the LCD cabinet with screws. Although the assembly is made available for the service parts, it has to be returned to its original state if the LCD PWB was removed for parts replacement. Refer to a later paragraph discussing "LCD unit disassembly and re-assembly" for details of assembly.

(Printing sample)

INTRODUCING SHARP'S WORD PROCESSORS

This innovative product from Sharp Corporation is a fully dedicated word processing system with MS-DOS Compatible Disk Format. This is an all-in-one system consisting of an LCD Display with Backlight (PA-W1410 only) for easier viewing, a printer, a 3.5" Disk Drive and a full Function Keyboard.

This Word Processor is easy to use with many Menu Driven Functions and preset Function Keys, all you do is press one key and you're on your way to a flawlessly typed text, then store it on the disk for future use.

With the Merge Print feature you can insert names, addresses etc., to all your letters and reports automatically. And with the Form Fill-in feature you can easily complete preset forms in a fraction of time than the old manual way.

Sharp's Word Processor can be used for Faster, Efficient and Convenient word processing tasks or with a touch of one key use it as an electronic typewriter.

THIS ADVANCED PRODUCT ALSO HAS MANY BUILT-IN FEATURES:

* An easy to read **80 character x 16 line LCD Backlit Screen** (PA-W1410 only).
* A built-in **50,000 character Memory.**
* An **MS-DOS Compatible Disk with 720KB** per disk storage capacity for unlimited memory.
* A **15 cps Bidirectional** Letter Quality Daisy Wheel Printer.
* An **80K word Spelling Dictionary with on-line Thesaurus.**
* **Usage Checker checks** for 11 punctuation and grammatical errors.

Word Processing:

* Block Move/Delete/Copy	* Search and Replace
* Auto Insert	* Merge Print
* Page Formatting	* View Page Layout
* Form Fill-in	* Auto Storing
* Disk and File Utilities	* ASCII Text Conversion

Printing Controls:

* Auto Return	* Auto Center	* **Auto Bold**
* Auto Underline	* Auto Indent	* Word Count
* Auto Justification	* Auto Decimal Tab	* Capital Lock
* Superscript	* Subscript	* Flush Right

Correction Systems:

* Word Correction	* Two Line Correction Memory
* Relocate	* Micro Backspace
* Word Backspace	* Character Correction

This Word Processor will make your most difficult typing task easy. Each page you type will convince you that you've made a wise choice in your purchase of Sharp's Word Processor.

(3) Cautions

1. Be sure to disconnect the power supply plug before disassembly.
2. The power must be turned off when installing or removing the PWB.
3. Hold the connector area when fastening or unfastening the connector. Never manipulate the cable.
4. Do not bend the carriage wire too often as it is not robust against bending.
5. Lubrication must be done to the specific areas only.
6. The LCD unit must be stored in a state assembled to the cabinet, in order to avoid possible occurrence of contact failure and damage that may occur if it was left by itself.
7. CAUTION: This model has two power switches: (1) the main power switch in the left rear side of the body, and (2) the POWER key in right upper side of the keyboard.
   If the power is turned off by pressing the POWER key in the keyboard before turning off the main power switch, the following power ON procedure requires pressing of the POWER key in the keyboard.

(4) Tools required

The following tools are required for servicing.

No.	Part code	Price Rank	Name
1	UKOGM1068CSZZ	BE	Loupe (x15)
2	UKOGM0050CSZZ	AU	Set of allen wrenches (1.27, 1.5, 2.0, 2.5, 3.0)
3	00PCB-1G102A/	BF	Key top removing tool
4	UKOGM0075CSZZ	BB	0.1~5.0 mm thickness gauge
5	UKOGM5001BCZZ	BT	Tension gauge (3.0 kg)
6	UKOGM2024CSZZ	AM	LCD removing tool
7	UKOG-5013BCZZ	AS	Wheel wrench

(5) Lubrication

No.	Part code	Price Rank	Name
1	OCHFL0iLG311S	AX	Grease (Floil G-311S)
2	UKOG-0185CSZZ	AV	Screw grease (No, 400)

[2] Specifications

(1) Specification

* 1 The ribbon (1) must always be used in pair with the correction tape (2). Otherwise, it may fail to correct.

MODEL / SPECIFICATIONS	PA-W1400/1410
PRINTING	
Print speed	15 cps, Bidirectional print
Printwheel	96 characters, removable (Non cassette type)
Print pitch	10 or 12
WIDTH	
Paper	13 inches
Typing	10 inches
RIBBON TYPE	Correctable carbon film, approx. 50,000 characters
CORRECTION TABLE	Lift-off correctable carbon film, approx. 1,200 characters
KEYBOARD	
Alphanumeric keys	44
Key buffer	32
Self-repeat keys	Return, Backspace, Space Bar, Left Arrow, Right Arrow, Up Arrow, Down Arrow, Auto Correction, the Code and Up Arrow keys, the Code and Down Arrow keys
DISPLAY	
Type	PA-W1400: Liquid Crystal Display PA-W1410: Liquid Crystal Display with backlight
Capacity	80 character x 16 line (640 x 200 dots)
MEMORY	
Automatic Correction Zone	2 line (Max. 256 characters per line)
Bulit-in Memory	50K byte
DISK DRIVE	
Type	Built-in, 3.5 inch (DSDD) Micro Floppy Disk
Format	*MS-DOS disk format compatible
Capacity	720K byte/disk
SPELLING DICTIONARY	
Main Dictionaly	Approx. 80,000 words
User's Dictionary	Approx. 200 words
Thesaurus	Approx. 15,000 entry words and approx. 150,000 synonyms
POWER	Approx. 45 watts, AC voltage (±10%) 50/60Hz
ENVIRONMENTS	
Operating Temperature	41 to 104°F (5 to 40°C)
Ambient Humidity	20 to 85% RH, w/o condensation
DIMENSIONS	16.46"(W) x 15.71"(D) x 4.92"(H) 418(W) x 399(D) x 125(H) mm
WEIGHT	PA-W1400: Approx. 16.1 lbs. (7.3 kg) PA-W1410: Approx. 16.5 lbs. (7.5 kg)
OPTIONAL ACCESSORIES	
(1) {ZX-3CS1, ZX-4LF}	Correctable carbon film ribbon Lift-off correction tape (dual pack)
(2) {ZX-3FS1, ZX-4CT} Except U.S.A	Fabric ribbon Cover-up correction tape (dual pack)
(3) Print wheels	Reference to "[2]-(2). Option print wheels".

(2) Option print wheels

The print wheel: appricable varies according to the destination. For details, refer to the "DESTINATION TABLE" in the parts guide.

Type	Name of Type Style and Pitch		CSA No.	Order Number
H	COURIER	10	270-176	ZX-9176H
	PRESTIGE ELITE	12	270-020	ZX-9020H
	CUBIC	10 12	270-046	ZX-9046H
	SCRIPT	12	270-032	ZX-9032H
	CUBIC	12 15	270-046	ZX-0964H
	MADELEINE	PS	270-052	ZX-9052H
L	COURIER	10	269-176	ZX-9176L
	CUBIC	10 12	269-046	ZX-9046L
	SCRIPT	12	269-032	ZX-9032L
	LIGHT ITALIC	12	269-067	ZX-9067L
	TILE	12 15	269-125	ZX-9125L
	MADELEINE	PS	269-052	ZX-9052L
M	COURIER	10	268-176	ZX-9176M
	CUBIC	10 12	268-046	ZX-9046M
	SCRIPT	12	268-032	ZX-0932M
	LIGHT ITALIC	12	268-067	ZX-9067M
	TILE	12 15	268-125	ZX-9125M
	MADELEINE	PS	268-052	ZX-9052M
N	COURIER	10	267-176	ZX-9176N
	CUBIC	10 12	267-046	ZX-9046N
	SCRIPT	12	267-032	ZX-9032N
	LIGHT ITALIC	12	267-067	ZX-9067N
	TILE	12 15	267-125	ZX-9125N
	MADELEINE	PS	267-052	ZX-9052N

NOTE: A non-cassette type printwheel is used for this model. Because it has a different mechanism with the printwheel in the cassette housing, be sure to use the specific type. Note that you cannot use the printwheel with the housing.

[3] Mechanical descriptions

(1) General

Since the mechanical unit of this model shares the use with that of the PA-3140II, procedures are identical to disassembly, re-assembly, and adjustments. (Only the hammer unit specially prepared for this model.)
This mechanism is made more simple by eliminating the adjustment locations as compared with the conventional model and designed with high reliability with more rigidity incorporated.

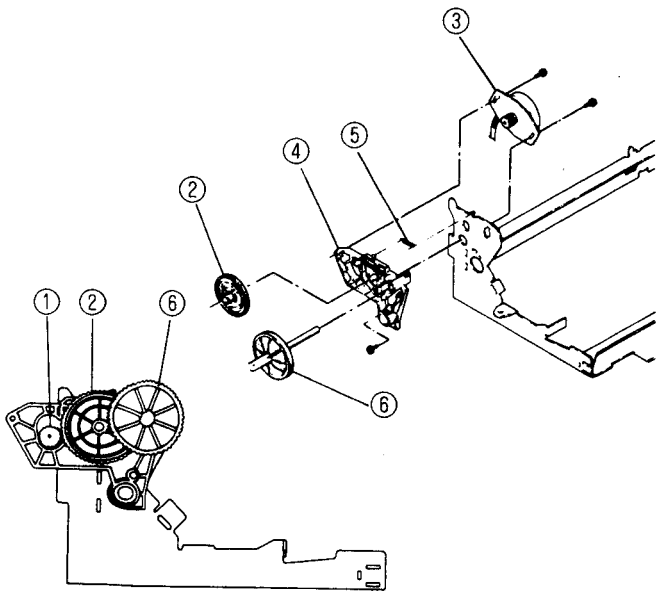
1. Paper feed mechanism

The paper feed mechanism employs the pulse motor drive system which works to rotate the platen via the pinion gear ① and idler gear ② when the paper drive signal is given from the main PWB.

As it uses a pulse motor, it can feed the paper with ease in both forward and backward directions. Paper is fed by 1/96" per pulse, and the detent works 1/24".

Mechanical fine adjustment is not provided. Fine adjustment is performed by means of software.

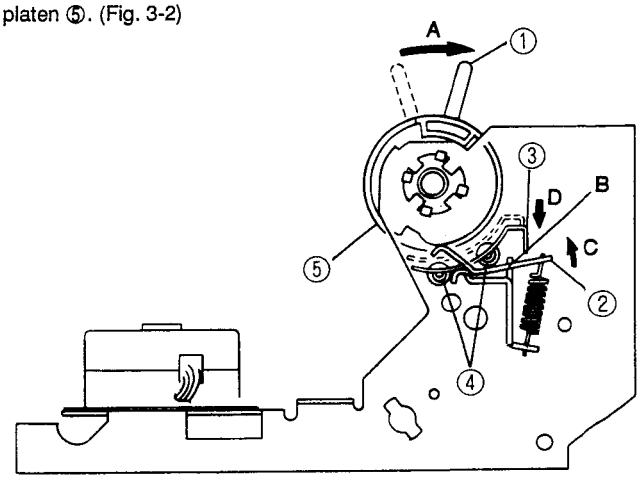
The pulse motor ③ and the idler gear ②, both mounted on the flexible PF holder ④, are pulled by the spring ⑤ toward the platen gear ⑥ with a fixed force. This keeps zero clearance between the idler gear ② and the platen gear ⑥, and no adjustment is necessary.



[Fig. 3-1]

2. Paper release mechanism

As shown in Fig. 3-4, when the paper release lever ① is moved in the arrow direction (A), the feed roll holder support ② rotates in the direction C around the pivot B. This allows the feed roll holder ③ to move downward, releasing the feed roll ④ from contact with the platen ⑤. (Fig. 3-2)



[Fig. 3-2]

3. Carriage structure and driving method

(Structure)

The carriage unit consists of the following drive blocks.

① Printwheel drive motor (WH motor)

② Ribbon lift/feed drive motor (RB motor)

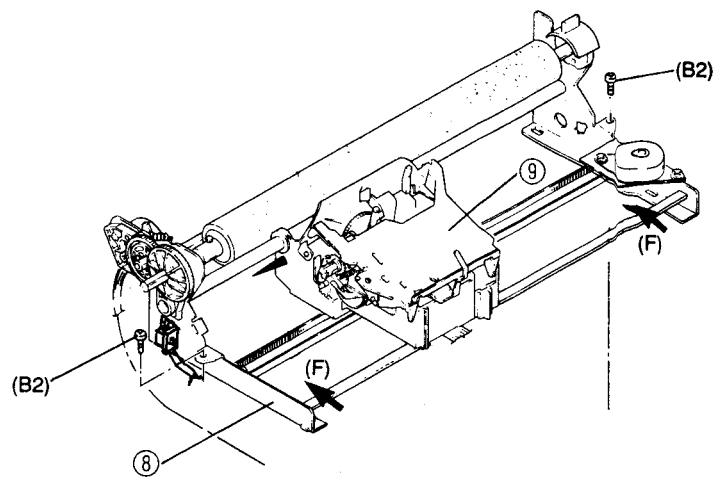
③ Print hammer solenoid (HM solenoid)

(Drive system)

The carriage is driven by the carriage motor (CR motor), located on the right side frame of the printer, via the carriage timing belt.

(Home position)

Immediately after power on, the carriage starts to the left of the platen. When it reached the mechanical left margin, the sensor switch on the left side of the printer mechanism is pushed by a needle-shaped lever that protrudes from the left side of the carriage and the carriage momentarily stops. Then, it moves to right to the left margin and stops at the first printing position.

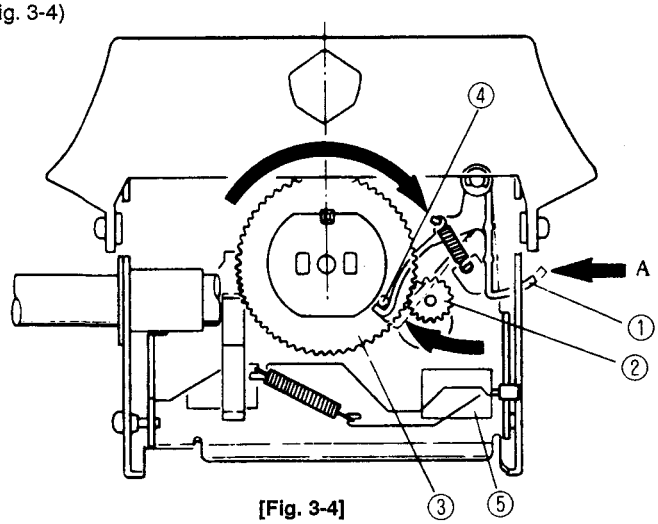


[Fig. 3-3]

4. Printwheel home positioning mechanism

The printwheel can be set at its home position by the zero sense lever ① and the stepping motor ② driven printwheel flange ③, in the reduction of 1:4.

After power on, the carriage and the printwheel are set at their home positions. During home positioning of the carriage, the zero sense lever ① contacts the main frame at the left mechanical margin and moves in the arrow direction A, and the zero sense lever stopper ④ engages with the printwheel flange ③ stops its motion, the printwheel flange ③ driving motor ⑤ disengages, to complete home positioning. (Fig. 3-4)



[Fig. 3-4]

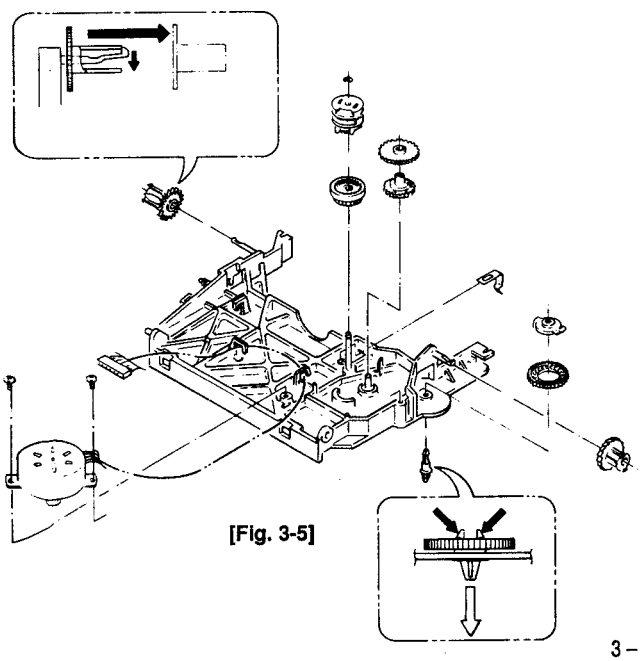
NOTE: As there is no significant difference from the conventional model, Either the cassette type or non-cassette type printwheel may be used if some of parts are replaced, though it may not be done by the user.

5. Ribbon dirve and correction mechanism

The ribbon is taken up by the pulse motor and the cam is driven by the same motor to lift the correction tape.

The motor is installed on the ribbon holder which is different from the predecessor model, in order to avoid some problem in the mechanical action and parts accuracy of the drive train which was necessary to transmit mechanical power to the ribbon holder that shift up and down with the predecessor model.

There is no home position sensor used in this new mechanism, but the home position is established by disengaging the motor at the end of the cam slit.

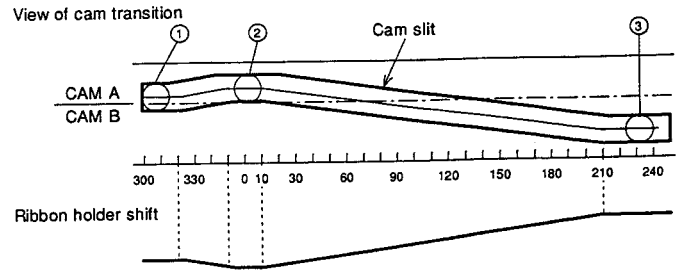


[Fig. 3-5]

(Cam)

A cylindrical cam is used which consists of two parts (cam A, cam B) because of parts molding and it has three positions described next.

① Print and ribbon feed position:	The cams rotate idle during the ribbon feed operation.
② Standby position:	The cams rest in this position for a certain period after the printing has been completed.
③ Correct position:	The cams ascend to this position to make correction.



[Fig. 3-6]

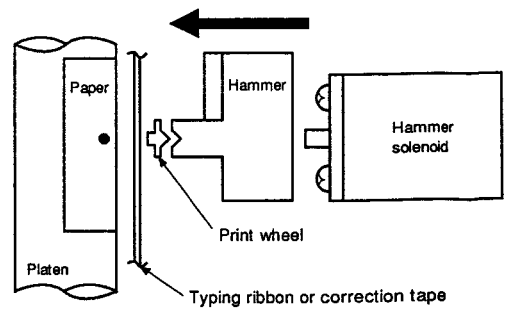
Since the cam is installed on the moving side (ribbon holder) and a follower pin on the stationary side (carriage base), up and down of the cam slit and the ribbon holder vertical action are opposite to the conventional type.

6.Hammer solenoid driving

A hammer is driven by the hammer solenoid to print a character using the print ribbon. The correct tape is used to erase the character typed. A different current carrying time exists for the hammer solenoid to print a character.

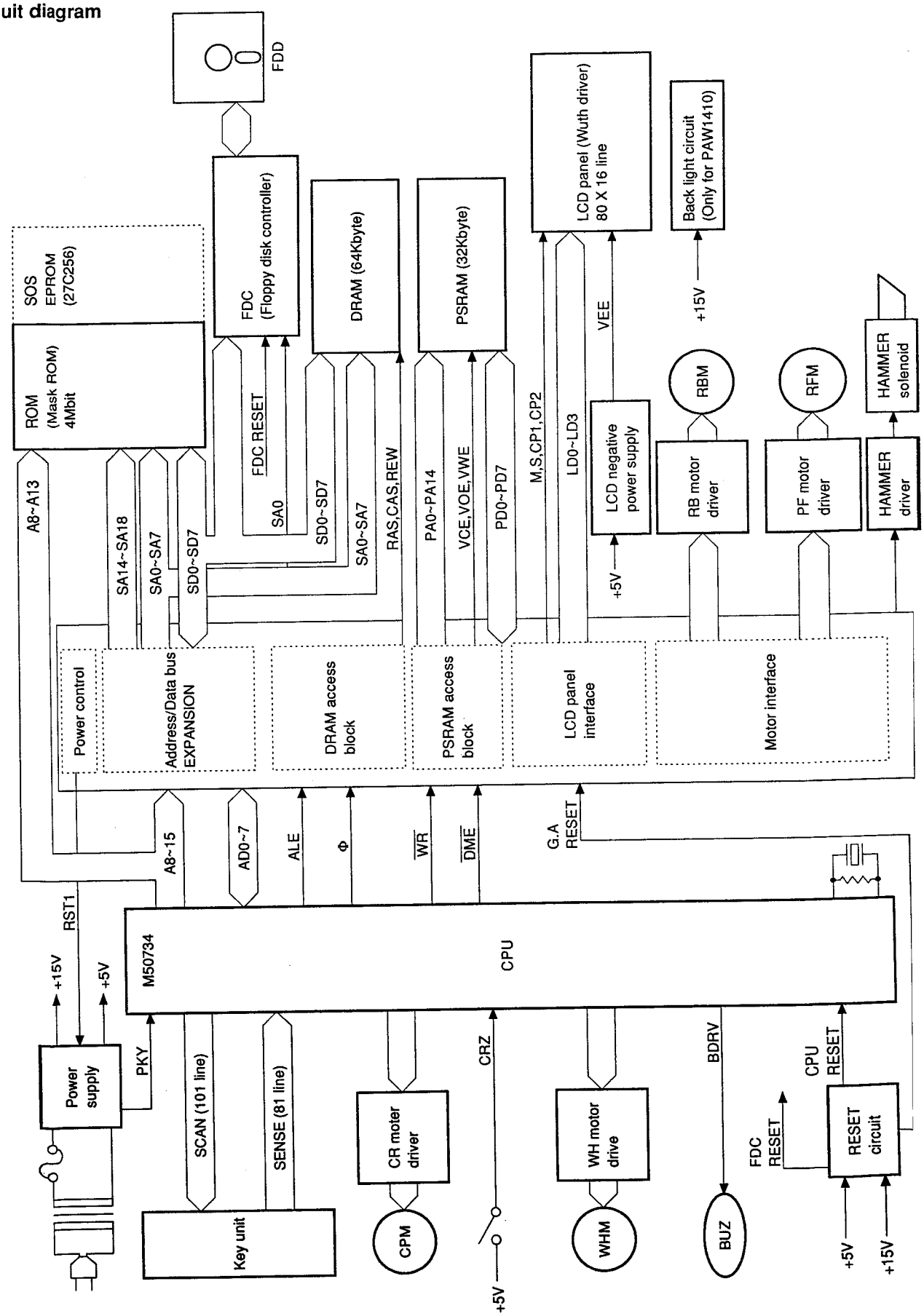
(Ex): • (A character with a small surface area)...Shorter current carrying time

H (A character with a larger surface area)...Longer current carrying time



[4] ELECTRICAL SECTION

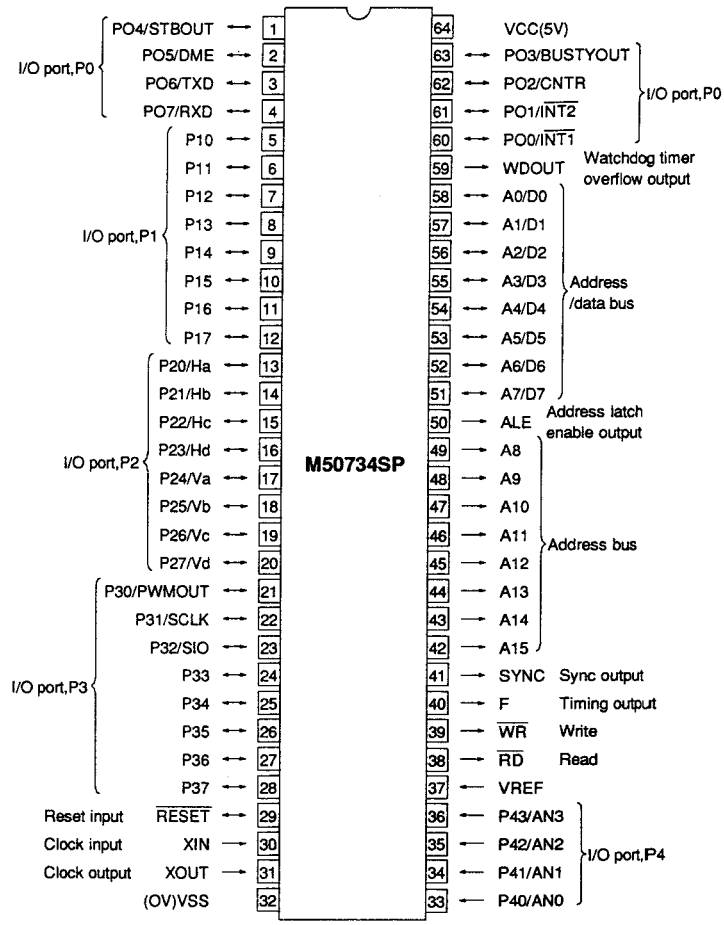
Circuit diagram



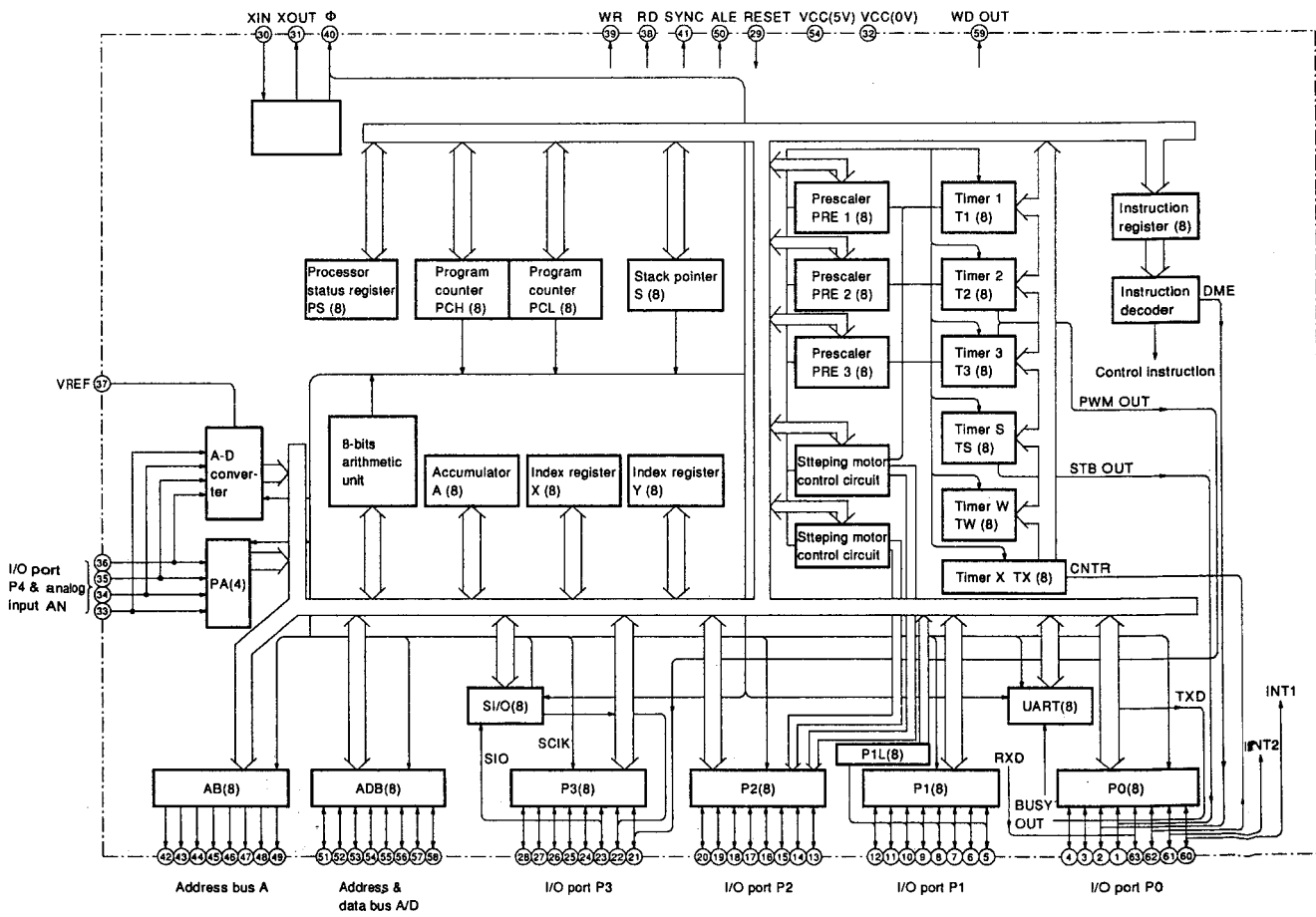
(1) outline of electrical section

The CPU of this model is M50734SP, which is a C-MOS 8-bit single-chip microcomputer composed of the M50740 CPU core, clocked serial I/O, A-D convertor, watch dog timer, and 35 lines of parallel I/O.
The CPU has 1MB direct access memory space and 35 lines of I/O ports. The gate array (G.A.) UPD65027G is provided in the peripheral of the CPU, composing the bank circuit.
ROM's of 4MB and 256KB, dynamic RAM of 256KB, and static RAM (TC51832) of 256KB are used to store all control programs and data for spell check, thesaurus, and grammar.
The CR (carrier) motor, WH (wheel) motor, and KEY are controlled through the CPU I/O ports.
The RB (ribbon) motor, PF (paper feed) motor, HAMMER-solenoid, LCD, and FDD (floppy disk drive) are controlled through the extension ports of the gate array.
The CPU pin configuration and block diagram are shown below:

CPU pin configuration



CPU block diagram



PA-W1410/1400

CPU (M50734) Pin Configuration

Pin No.	CPU signal name	Circuit diagram signal name	I/O	Signal function
1	P04	PKY	I	Software power key sense signal
2	$\overline{DME}$	$\overline{DME}$	O	Data memory access signal
3	P06	SCAN8	O	Data scan signal (line 8)
4	P07	SCAN9	O	Data scan signal (line 9)
5	P10	SCAN0	O	Data scan signal (line 0)
6	P11	SCAN1	O	Data scan signal (line 1)
7	P12	SCAN2	O	Data scan signal (line 2)
8	P13	SCAN3	O	Data scan signal (line 3)
9	P14	SCAN4	O	Data scan signal (line 4)
10	P15	SCAN5	O	Data scan signal (line 5)
11	P16	SCAN6	O	Data scan signal (line 6)
12	P17	SCAN7	O	Data scan signal (line 7)
13	P20	CM4	O	Carriage motor excitement phase signal (– B phase)
14	P21	CM3	O	Carriage motor excitement phase signal (– A phase)
15	P22	CM2	O	Carriage motor excitement phase signal (B phase)
16	P23	CM1	O	Carriage motor excitement phase signal (A phase)
17	P24	WM4	O	Wheel motor excitement phase signal (–B phase)
18	P25	WM3	O	Wheel motor excitement phase signal (–A phase)
19	P26	WM2	O	Wheel motor excitement phase signal (B phase)
20	P27	WM1	O	Wheel motor excitement phase signal (A phase)
21	P30	SENSE0	I	Key sense signal (bit 0)
22	P31	SENSE1	I	Key sense signal (bit 1)
23	P32	SENSE2	I	Key sense signal (bit 2)
24	P33	SENSE3	I	Key sense signal (bit 3)
25	P34	SENSE4	I	Key sense signal (bit 4)
26	P35	SENSE5	I	Key sense signal (bit 5)
27	P36	SENSE6	I	Key sense signal (bit 6)
28	P37	SENSE7	I	Key sense signal (bit 7)
29	$\overline{RESET}$	$\overline{RESET}$	I	System reset signal
30	XIN	XIN	I	CPU clock source oscillation input
31	XOUT	—	O	CPU clock source oscillation output
32	Vss	GND	—	Power source (GND)
33	P40	J3	I	Default print pitch (10/12)
34	P41	J4	I	Digital tab division symbol (./,,)
35	P42	J5	I	Default print pressure (High/Low)
36	P43	DISK CHANGE	I	Disk change generation signal
37	VREF	GND	—	Power source (GND)
38	$\overline{RD}$	$\overline{RD}$	O	Data read timing signal
39	$\overline{WR}$	$\overline{WR}$	O	Data write timing signal
40	Φ	Φ	O	System clock signal
41	SYNC	SYNC	O	Command code read timing signal
42	A15	A15	O	Address bus signal (bit 15)
43	A14	A14	O	Address bus signal (bit 14)
44	A13	A13	O	Address bus signal (bit 13)
45	A12	A12	O	Address bus signal (bit 12)
46	A11	A11	O	Address bus signal (bit 11)
47	A10	A10	O	Address bus signal (bit 10)
48	A9	A9	O	Address bus signal (bit 9)
49	A8	A8	O	Address bus signal (bit 8)
50	ALE	ALE	O	Address latch timing signal
51	A7/D7	A7/D7	I/O	Address/data bus signal (bit 7)
52	A6/D6	A6/D6	I/O	Address/data bus signal (bit 6)
53	A5/D5	A5/D5	I/O	Address/data bus signal (bit 5)
54	A4/D4	A4/D4	I/O	Address/data bus signal (bit 4)
55	A3/D3	A3/D3	I/O	Address/data bus signal (bit 3)
56	A2/D2	A2/D2	I/O	Address/data bus signal (bit 2)
57	A1/D1	A1/D1	I/O	Address/data bus signal (bit 1)
58	A0/D0	A0/D0	I/O	Address/data bus signal (bit 0)
59	WDOUT	WDOUT	O	Watch dog timer output signal
60	P00	$\overline{CRZ}$	I	Carriage origin detecting signal
61	P01	HM	O	Hammer drive signal
62	P02	BDRV	O	Buzzer drive signal
63	P03	TC	O	FDC data transmission halt signal
64	Vcc	+5V	—	Power source (+5V)

PA-W1410/1400

Gate Array Pin Configuration

Pin No.	Signal name	I/O	Signal function
1	VDD	—	Power supply (+5V)
2	XOUT	I	Clock output
3	XIN	I	Clock input
4	$\overline{WR}$	I	CPU data write timing signal
5	Φ	I	CPU bus cycle signal
6	A15	I	CPU address bus (Bit 15)
7	A14	I	CPU address bus (Bit 14)
8	A13	I	CPU address bus (Bit 13)
9	A2	I	CPU address bus (Bit 12)
10	A11	I	CPU address bus (Bit 11)
11	A10	I	CPU address bus (Bit 10)
12	A9	I	CPU address bus (Bit 9)
13	A8	I	CPU address bus (Bit 8)
14	ALE	I	Address latch enable
15	GND	—	GND
16	GND	—	GND
17	AD7	I/O	CPU address/Data bus (Bit 7)
18	AD6	I/O	CPU address/Data bus (Bit 6)
19	AD5	I/O	CPU address/Data bus (Bit 5)
20	AD4	I/O	CPU address/Data bus (Bit 4)
21	AD3	I/O	CPU address/Data bus (Bit 3)
22	AD2	I/O	CPU address/Data bus (Bit 2)
23	AD1	I/O	CPU address/Data bus (Bit 1)
24	AD0	I/O	CPU address/Data bus (Bit 0)
25	GND	—	GND
26	SW1	I/O	Switch input 1
27	SW2	I	Switch input 2
28	SW3	I	Switch input 3
29	SW4	I	Switch input 4
30	VDD	—	Switch input
31	GND	—	GND
32	PD3	I/O	Pseudo—SRAM data bus (bit 3)
33	PD2	I/O	Pseudo—SRAM data bus (bit 2)
34	PD4	I/O	Pseudo—SRAM data bus (bit 4)
35	PD1	I/O	Pseudo—SRAM data bus (bit 1)
36	PD5	I/O	Pseudo—SRAM data bus (bit 5)
37	PD0	I/O	Pseudo—SRAM data bus (bit 0)
38	PD6	I/O	Pseudo—SRAM data bus (bit 6)
39	PD7	I/O	Pseudo—SRAM data bus (bit 7)
40	GND	—	GND
41	PA0	O	Pseudo—SRAM address bus (bit 0)
42	VCE	O	Pseudo—SRAM select signal
43	PA1	O	Pseudo—SRAM address bus (bit 1)
44	PA10	O	Pseudo—SRAM address bus (bit 10)
45	PA2	O	Pseudo—SRAM address bus (bit 2)
46	$\overline{VOE}$	O	Pseudo—SRAM data output allowing signal
47	PA3	O	Pseudo—SRAM address bus (bit 3)
48	PA11	O	Pseudo—SRAM address bus (bit 11)
49	PA4	O	Pseudo—SRAM address bus (bit 4)
50	PA9	O	Pseudo—SRAM address bus (bit 9)
51	PA5	O	Pseudo—SRAM address bus (bit 5)
52	PA8	O	Pseudo—SRAM address bus (bit 8)
53	PA6	O	Pseudo—SRAM address bus (bit 6)
54	PA13	O	Pseudo—SRAM address bus (bit 13)
55	PA7	O	Pseudo—SRAM address bus (bit 7)
56	$\overline{VWE}$	O	Pseudo—SRAM data write timing signal
57	PA12	O	Pseudo—SRAM address bus (bit 12)
58	PA14	O	Pseudo—SRAM address bus (bit 14)
59	$\overline{DME}$	I	Data memory select signal
60	GND	—	GND

Pin No.	Signal name	I/O	Signal function
61	VDD	—	+5V power
62	$\overline{RES}$	I	Internal gate reset signal
63	HDVR	O	Hammer drive signal
64	RST1	O	Power OFF signal
65	S	O	LCD scan start signal
66	CP1	O	LCD data latch timing signal
67	CP2	O	LCD data shift lock signal
68	M	O	LCD drive power AC—conversion signal
69	LD0	O	LCD data (bit 0)
70	LD1	O	LCD data (bit 1)
71	LD2	O	LCD data (bit 2)
72	LD3	O	LCD data (bit 3)
73	RM4	O	Ribbon motor exciting phase signal (—B phase)
74	RM3	O	Ribbon motor exciting phase signal (B phase)
75	GND	—	GND
76	GND	—	GND
77	RM1	O	Ribbon motor exciting phase signal (A phase)
78	RM2	O	Ribbon motor exciting phase signal (—A phase)
79	WDRV	O	Wheel motor drive signal
80	RDRV	O	Ribbon motor drive signal
81	PDRV	O	Paper feed motor drive signal
82	PM1	O	Paper feed motor exciting phase signal (A phase)
83	PM2	O	Paper feed motor exciting phase signal (—A phase)
84	PM3	O	Paper feed motor exciting phase signal (B phase)
85	PM4	O	Paper feed motor exciting phase signal (—B phase)
86	CDRV	O	Carriage motor drive signal
87	$\overline{FDCCS}$	O	Floppy disk controller select signal
88	$\overline{SOSCS}$	O	SOS ROM select signal
89	$\overline{ROMCS}$	O	4M mask ROM select signal
90	VDD	—	+5V power
91	GND	—	GND
92	SA14	O	System address bus signal (bit 14)
93	SA15	O	System address bus signal (bit 15)
94	SA16	O	System address bus signal (bit 16)
95	SA17	O	System address bus signal (bit 17)
96	SA19	O	System address bus signal (bit 19)
97	SA18	O	System address bus signal (bit 18)
98	GND	—	GND
99	SA7	O	System address bus signal (bit 7)
100	SA4	O	System address bus signal (bit 4)
101	SA3	O	System address bus signal (bit 3)
102	SA5	O	System address bus signal (bit 5)
103	SA2	O	System address bus signal (bit 2)
104	SA6	O	System address bus signal (bit 6)
105	SA1	O	System address bus signal (bit 1)
106	$\overline{RAS}$	O	Dynamic RAM low address strobe
107	SA0	O	System address signal (bit 0)
108	$\overline{RWE}$	O	Dynamic RAM data write timing signal
109	$\overline{CAS}$	O	Dynamic RAM collum address strobe
110	—	O	Not connected.
111	NEG	I	LCD data reversion command signal
112	SD6	I/O	System data bus (bit 6)
113	SD7	I/O	System data bus (bit 7)
114	SD5	I/O	System data bus (bit 5)
115	SD4	I/O	System data bus (bit 4)
116	SD2	I/O	System data bus (bit 2)
117	SD1	I/O	System data bus (bit 1)
118	SD3	I/O	System data bus (bit 3)
119	SD0	I/O	System data bus (bit 0)
120	GND	—	GND

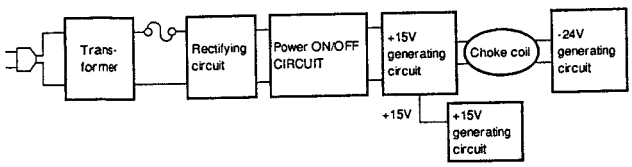
[Description]

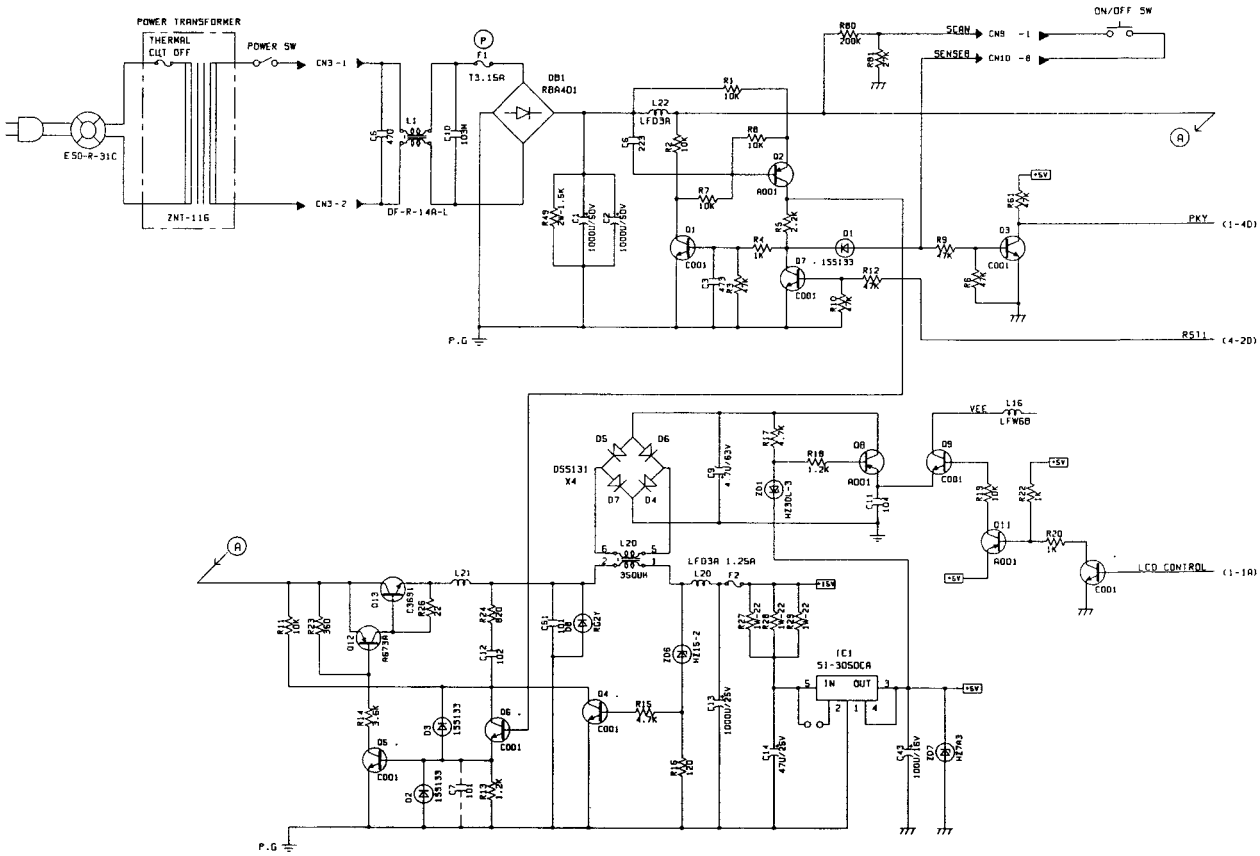
This circuit is composed of the six functional blocks: the power source block, the mechanism drive block, the key control block, the buzzer drive block, the LCD block, and the data storage block (memory, floppy disk).

1. Power source block

This block generates DC voltages from the commercially available power source and generates the circuit reset signal.

DC power circuit block diagram





(1) DC power generating block

DC power voltages used in this circuit are +15V, -5V, and -24V. The block diagram of the DC power generating block is shown below:

1) Transformer and rectifying circuit

In this circuit, the commercially available power is transformed into the secondary voltage (about AC30V) by the low-frequency transformer, then rectified by DB1, and smoothed by C1 and C2.

2) Power ON/OFF circuit

When the power key is pressed OFF without storing the data prepared in this machine, this circuit confirms storage of the data then shuts off the power with the software.

To supply power, the power key on the keyboard is pressed to turn on the flip-flop composed of Q1 and Q2, starting the self-excited switching of the +15V generating circuit.

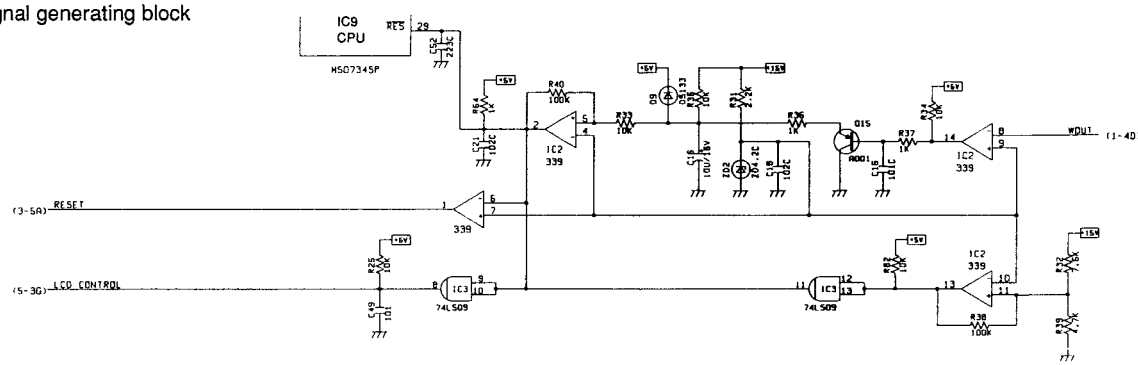
To turn off the power, the power key on the keyboard is pressed, and the CPU 1-pin becomes 0.8V or less. It is sensed by the software. After confirming the power OFF, RST1 signal at gate array 64-pin is made high to turn on Q7. As a result, Q1 and Q2 are turned off and the self-excited switching of the +15V generating circuit is stopped.

3) +15V generating circuit
When Q2 in the power ON/OFF circuit is turned on, the base voltage of Q5 is increased through R11 to turn on Q5, resultantly turning on Q12 and Q13. Thus the emitter voltage of Q13 is increased to about 35V.
When ZD6 cathode voltage increased to 15V or more through L20, Q4 base voltage increases to go into saturated state, turning off Q5, then turning off Q12 and Q13.
When the power transistor Q13 is turned off, a counter-electromotive force is generated by the energy stored in L20, and the power is discharged through D8.
When ZD6 cathode voltage falls below +15V, Q4 is turned off, turning on Q5, then turning on Q12 and Q13. By repeating the above operation, the output is maintained at a constant level.

4) –24V generating circuit
This circuit utilizes mutual inductance of L20 in the +15V generating circuit to perform full-wave rectification with D4 ~ D7. Q8 is turned on by ZD1 (+30V) to generate -24V.
The –24V is used as the negative power for the LCD panel. this voltage varies the contrast of the LCD. Time lag is provided to the negative power of the LCD and LCD control signal for Q9, Q11, and Q10. For details of time lag, refer to the reset circuit description.

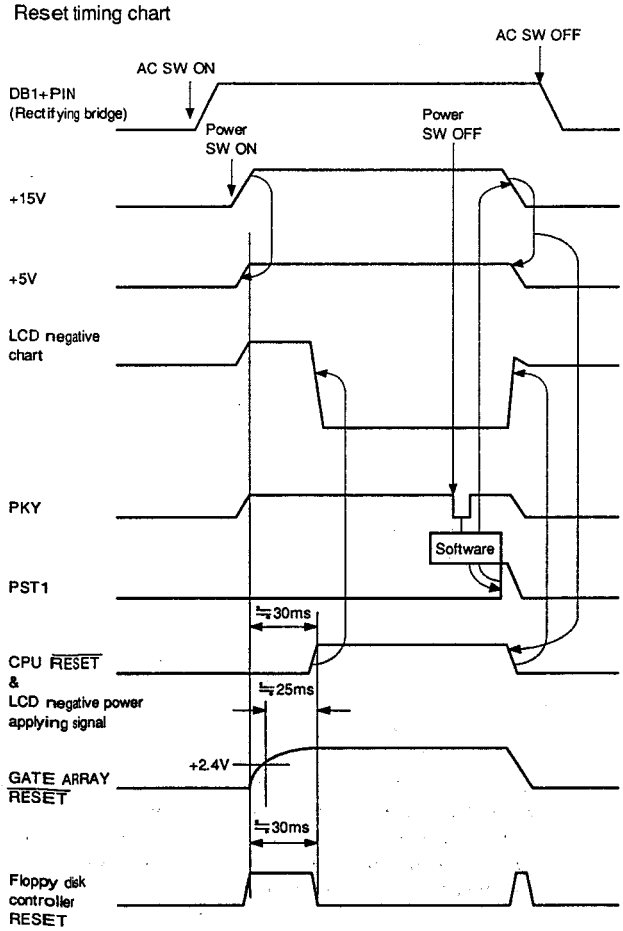
5) +5V generating circuit
This circuit stabilizes +5V with the Watt resistor and 5V three-terminal regulator.

(2) Reset signal generating block



This block generates four kinds of reset signals: CPU reset signal, gate array reset signal, floppy disk controller reset signal, and liquid-crystal negative power reset signal.
These signals monitor and generate +15V. The timing chart of the power ON and OFF is shown below:

Reset timing chart

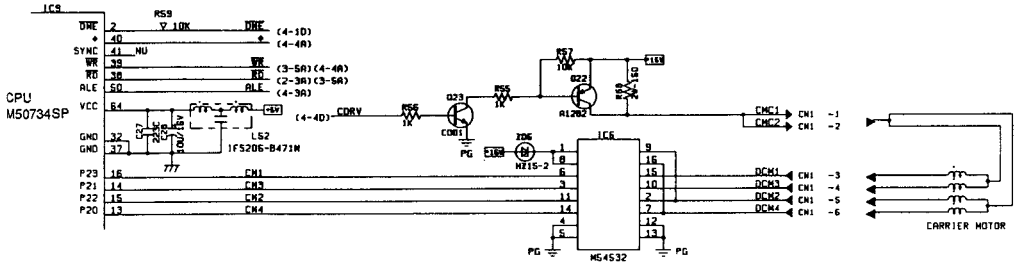


When the power is supplied, the CPU reset signal is charged from 15V through R35 to C16. It is kept low until C16 + pin voltage exceeds ZD2 VZ (+4/2V). When it exceeds VZ, the reset signal becomes high. In the case of power OFF, the reset signal becomes low from high when +15V becomes about 10V.
Since the gate array reset signal must be released at least 4us in advance to the CPU reset signal in order to take synchronization with the CPU bus cycle, it is released in advance to the CPU.
The floppy disk controller reset signal has the opposite polarity to the CPU.
Since the liquid-crystal power reset signal must be released at least 10ms later than the gate array reset signal when the power is supplied, and must be reset at latest simultaneously when the power is cut off, it is reset at the same timing as the CPU reset signal.

2. Mechanism drive block

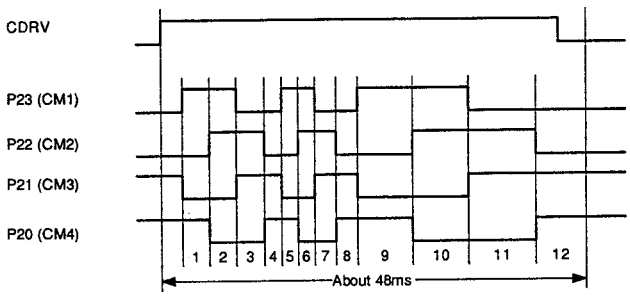
This block is composed of the drive section of the four pulse motors; CR (CARRIER), WH (wheel), RB (ribbon), and PF (paper feed); the hammer solenoid drive section, and the CARRIER origin detecting section.

(1) Pulse motor drive section
The pulse motor is controlled by the motor drive signal which turns on/off the power applied to the motor and the motor exciting signal which determines the motor rotation position.
The motor drive signal uses the gate array port for all the four motors. The motor exciting signal uses the CPU port 2 (12 ~ 20 pin) for CR and WH and the gate array port for RB and PF.
The four sections of this block have virtually same drive circuit composition and the same control system though the motor drive devices are different. Therefore description is made only on the CARRIER motor.

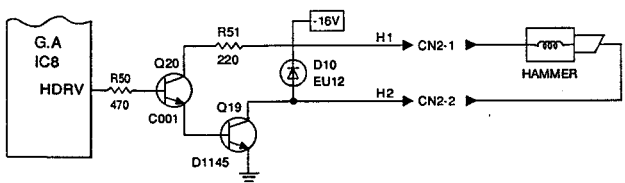


Each exciting phase signal outputted from the CPU is amplified by IC6 and used to determine the CR motor exciting position. By making CR motor drive signal (CDRV) from the gate array high, Q23 and Q22 are turned on and +15V is applied to the common terminal of CR motor, increasing the motor current. While by making CDRV low, Q23 and Q22 are turned off to apply the standby current to the CR motor through R58.
The control is performed by two-phase excitement shown in the timing below. The current applied to the motor common terminal is controlled by the CDRV.

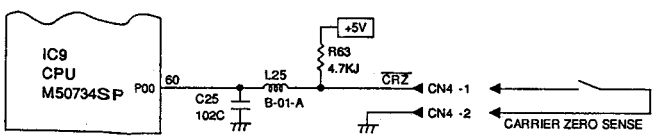
1/10" Spacing timings



(2) Hammer control section
This circuit makes the hammer ON signal from the gate array high to turn on Q20 and Q19, conducting the hammer solenoid.



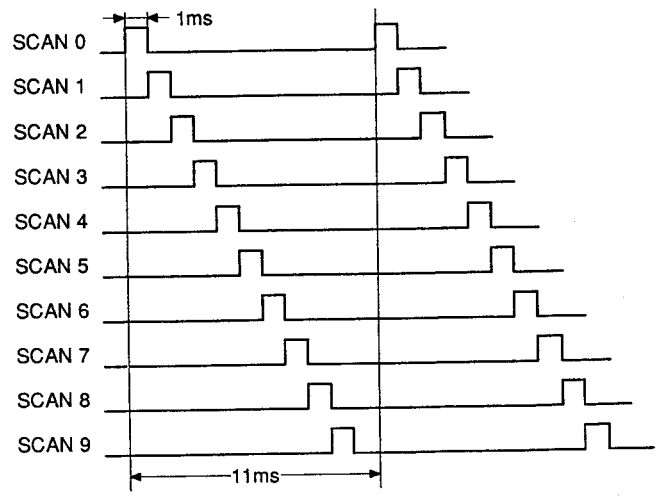
(3) CARRIER origin detecting section
When the CARRIER comes to the origin, the CPU 60 pin becomes low (max. 0.8V) and is detected by this circuit.



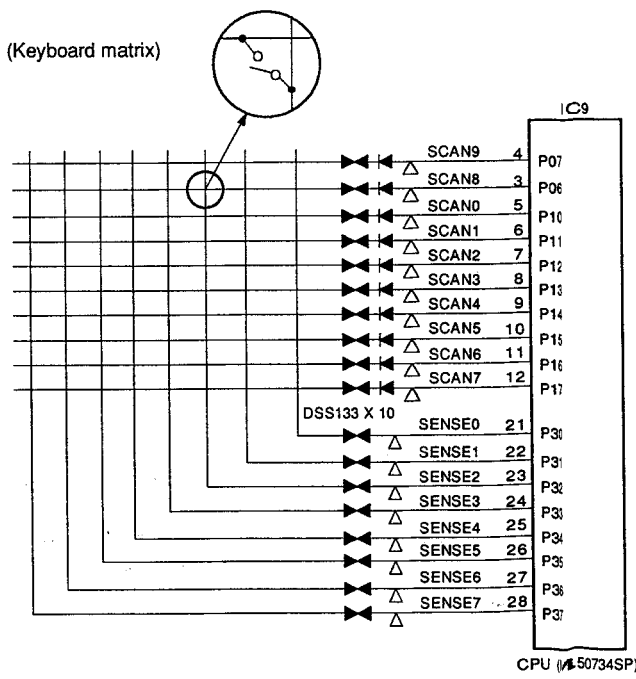
3. Key control block

This circuit uses the CPU port as scan line (output) and sense line (input), and recognizes the pressed key with the combination of them.
The scan line output timing is as shown below:
This machine recognizes 78 keys with combination of 10 scan lines and 8 sense lines. (The right and left shift keys are common.) The key matrix is as shown below:

(Key scan timing and cycles)



(Keyboard matrix)



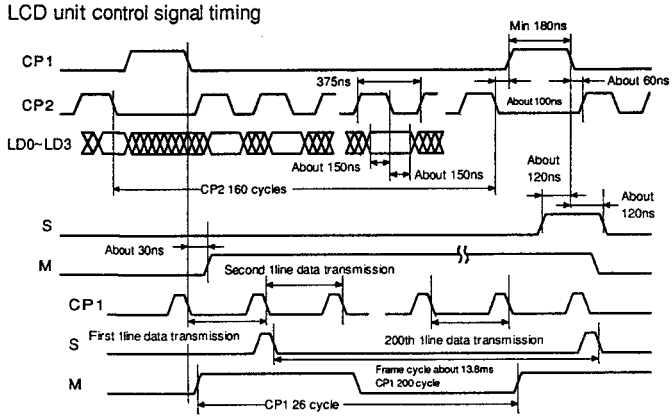
4. Buzzer drive block

This circuit utilizes the CPU rectangular waveform output function to output rectangular waveforms from port 0 bit 2 (IC9 62-pin), driving the buzzer.
The buzzer oscillation frequencies are about 4KHz for alarm sound and about 600Hz for confirmation sound.

5. Liquid crystal display block

This circuit is composed of a gate array and a pseudo-SRAM. The pseudo-SRAM is used for storing displayed data. The gate array mediates with the CPU for access, converts data read from the pseudo-SRAM into data for the LCD unit, and outputs the data with display control signals to the LCD unit.
The LCD unit control signal timing is shown below:

LCD unit control signal timing

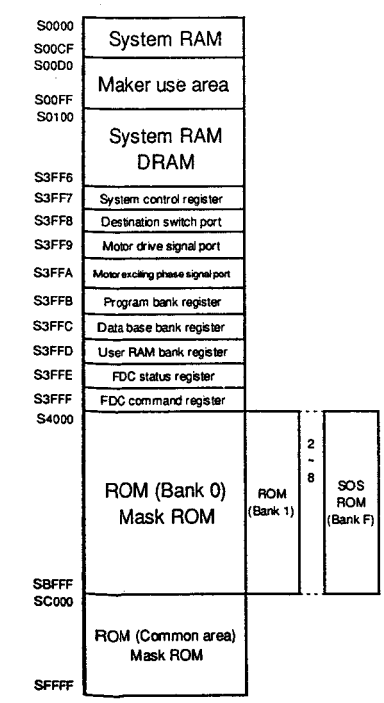


6. Data storing block

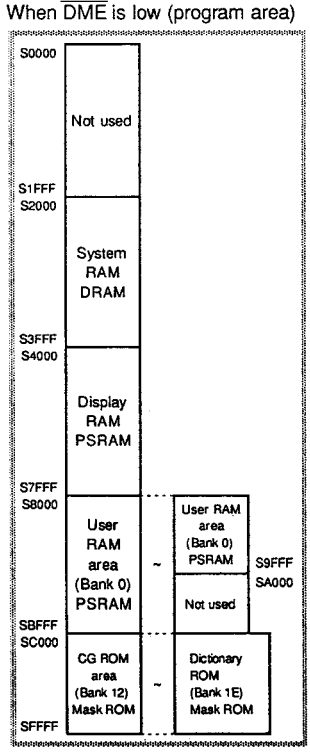
This block is composed of the ROM which enables data reading, RAM which can be read from and written into, and the floppy disk which is outside the PWB. The CPU memory map is shown below and description is made for each component.

CPU memory map

When $\overline{DME}$ is high (program area)



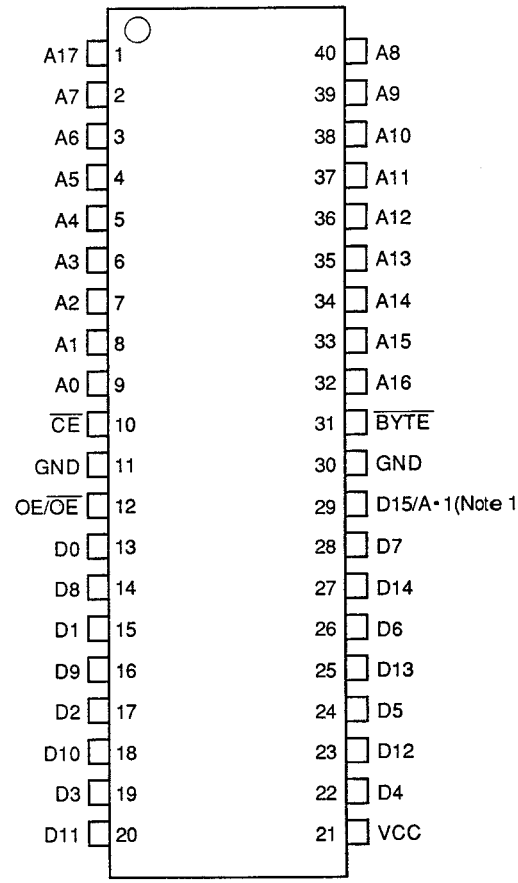
When $\overline{DME}$ is low (program area)



(1) ROM (Read Only Memory)
This circuit is composed of a 4MB mask ROM and a 256KB EPROM. The 256KB EPROM is SOS ROM which is not installed usually. The 4MB mask ROM pin configurations are shown bellow:

4MB Mask ROM pin configuration

Pin description



Signal	Pin name
A1~A17	Address input
D0~D15	Data output
$\overline{CE}$	Chip enable input
OE/$\overline{OE}$	Output enable input (Note 2)
BYTE	Byte word select input
VCC	Power pin (-5V)
GND	GND

(Note 1) When the bit composition is set as byte mode, 29-pin works as the address input pin (A-1). When the bit composition is set as word mode, it works as the data output pin (D15). Bit composition setting is made with BYTE input pin.
A-1 is the lowest address pin in the byte mode.

(Note 2) The active level of OE/$\overline{OE}$ is mask programmable.

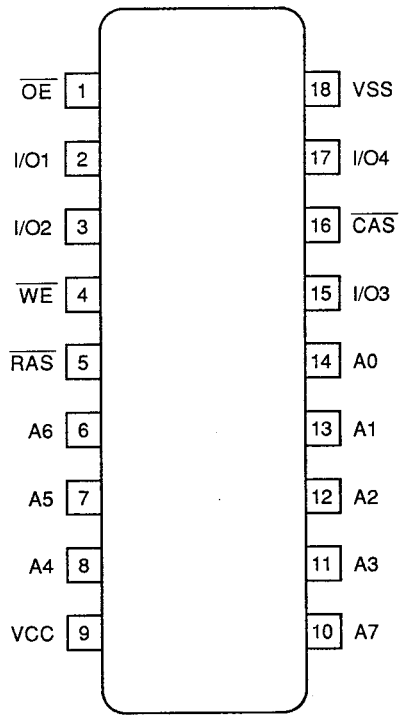
(2) RAM (Random Access Memory)

This circuit is composed of a 64K x 4 bit DRAM (Dynamic RAM), 32KB pseudo-SRAM (pseudo Static RAM, TC51832), and gate array.

When the CPU makes access to these memories, the gate array performs address conversion and generates read timing signal and refreshes DRAM memory.

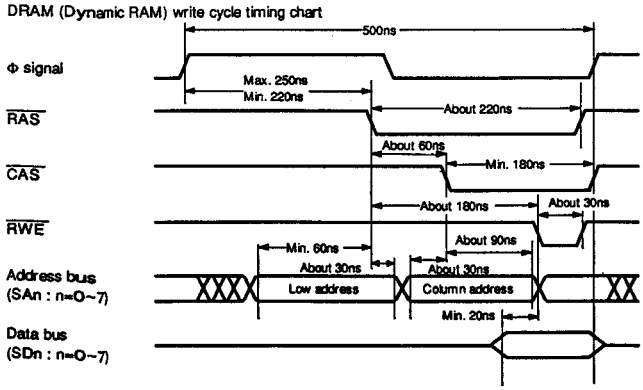
The DRAM read/write timing, refresh timing, pseudo-SRAM read/write timing, DRAM pin configurations, and pseudo-SRAM pin configurations are shown below:

DRAM Pin description

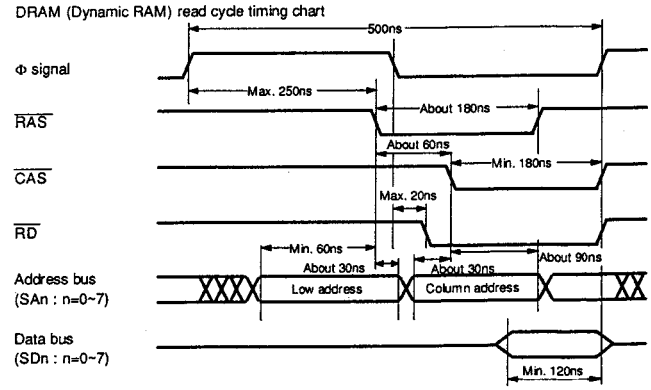


Code	Pin name	I/O
A0~A7	Address input	Input
$\overline{RAS}$	Line address strobe	Input
$\overline{CAS}$	Row address strobe	Input
$\overline{WE}$	Column address strobe	Input
$\overline{OE}$	Output enable	Input
I/O1~I/O4	Data I/O	Output
VCC	Power (+5V)	
VSS	Power (0V)	

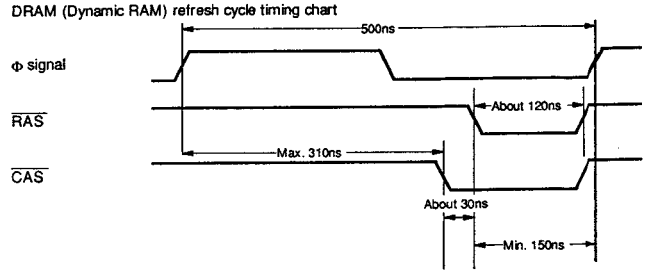
DRAM (Dynamic RAM) write cycle timing chart



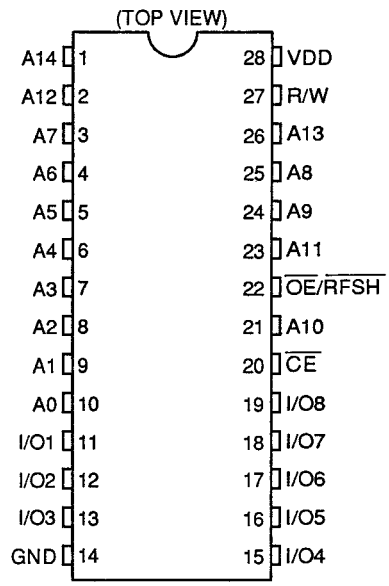
DRAM (Dynamic RAM) read cycle timing chart



DRAM (Dynamic RAM) refresh cycle timing chart



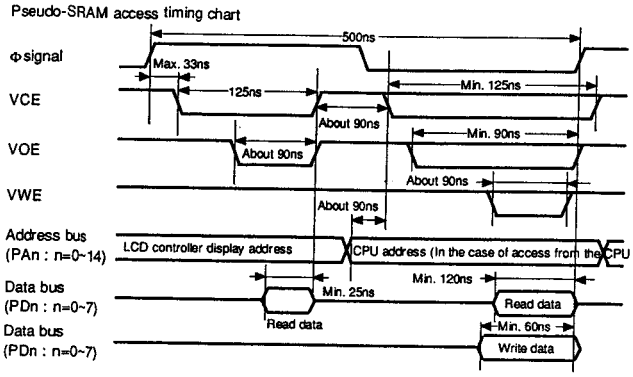
Pseudo – SRAM Pin description



A0~A14	Address input	Signal to specify storage address of read/write data.
R/W	Read write input	Read at HIGH, write at LOW.
$\overline{OE/RFSH}$	Output enable input Refresh input	When CE is LOW and OE is LOW, this device data I/O displays "data output enable."
$\overline{CE}$	Chip enable input	Shows that read/write operation is being executed to the chip.
I/O1~I/O8	Data I/O	Write data input,read data output
VDD	Power pin	
GND	GND	

Note: High: 2.4V ~ VDD
LOW: GND ~ 0.8V

Pseudo-SRAM access timing chart



(3) Floppy disk

This circuit is composed of a 3.5 inch 2DD (double side double density)floppy disk drive (FDD) and a floppy disk controller (FDC) (IC name: uPD72068GF).

The FDC pin functions are as shown below:

Floppy disk controller pin functions

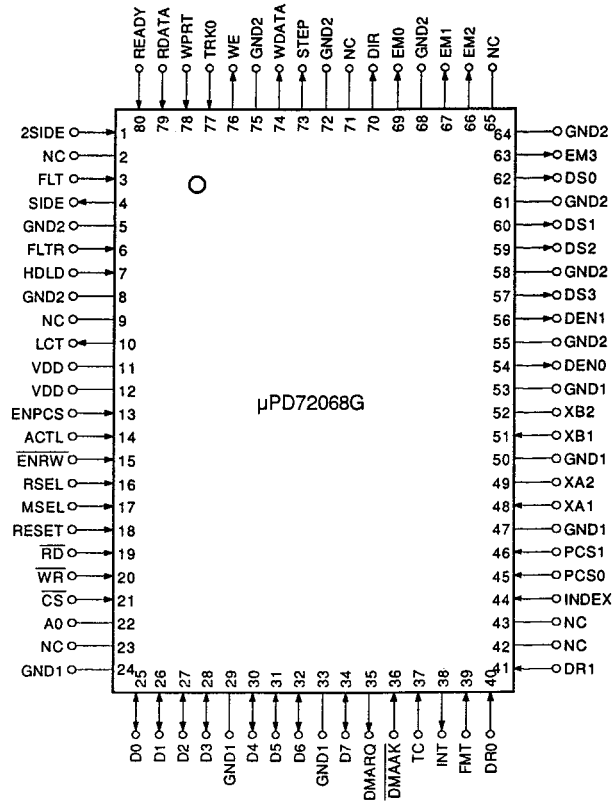
Pin No.	Signal name	I/O	Signal function
4	SIDE	O	Read/write head select signal. Head 1 at LOW, head 0 at HIGH.
1	2SIDE	I	FD media replaced at LOW.
80	READY	I	FDD read/write enable at LOW.
79	RDATA	I	Read data from FDD
78	WPRT	I	If the write protection notch of FD media is set at protection side, LOW is inputted.
77	TRK0	I	LOW when FDD head is at the most outward track.
76	WE	O	LOW when write data are transmitted to the FDD.
74	WDATA	O	Write data to the FDD.
73	STEP	O	FDD head shift timing signal. 1 track for 1 pulse.
70	DIR	O	FDD head shift direction signal. HIGH when shifting the head outward.
69	EM0	O	FD media rotating motor rotation start signal. LOW when starting rotation.
62	DS0	O	Drive select signal. LOW when input signal from FDD is significant.
44	INDEX	I	LOW when FD media track begins.
18	RESET	I	Device hardware reset signal. HIGh when resetting.
19	RD	I	Read timing signal from FDC to CPU. LOW when reading data.
20	WR	I	Data writing timing signal from CPU to FDC. LOW when writing data.
21	CS	I	CPU read/write destination select signal. LOW when selected as destination.
22	A0	I	FDC internal register select signal.
25	D0	I/O	FDC-CPU read/write data pin (bit 0)
26	D1	I/O	FDC-CPU read/write data pin (bit 1)
27	D2	I/O	FDC-CPU read/write data pin (bit 2)
28	D3	I/O	FDC-CPU read/write data pin (bit 3)
30	D4	I/O	FDC-CPU read/write data pin (bit 4)
31	D5	I/O	FDC-CPU read/write data pin (bit 5)
32	D6	I/O	FDC-CPU read/write data pin (bit 6)
34	D7	I/O	FDC-CPU read/write data pin (bit 7)
37	TC	I	FDD-FDC data transmission halt signal. HIGH when halting.

Note 1: High : 2.4V ~ VDD
LOW : GND ~ 0.8V

Note 2: FDC = Floppy Disk Controller
FDD = Floppy Disk Drive

Note 3: Pins not listed above are not used or for fixed signals.

FDC (Floppy Drive Controller)



[5] DISASSEMBLY AND ASSEMBLY

- This chapter describes the disassembly procedure. For assembly procedure, reverse the disassembly procedure.
- For the procedure which requires special care, [Note for disassembly/assembly] is provided.
- For lubrication, refer to the section on lubrication and greasing given hereinafter.
- Disassembly and assembly procedures must be performed deliberately in order to assure the reliability of the product.
- Descriptions for simple and easy replacement of units and parts are omitted.

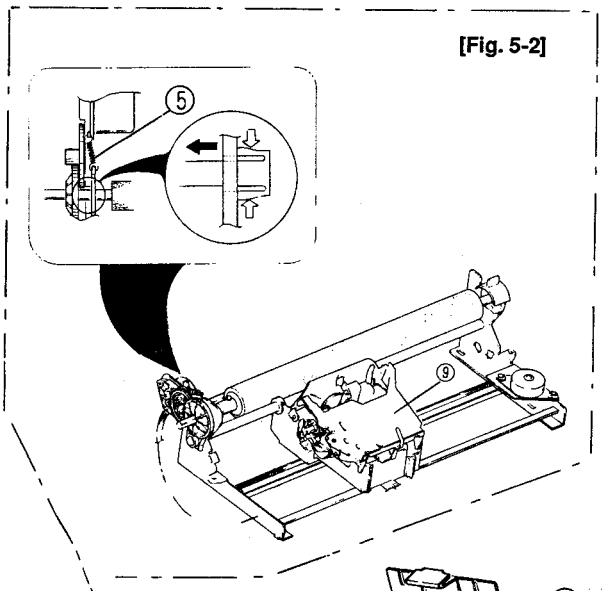
1. Upper cabinet (Fig. 5-1, Fig. 5-2)

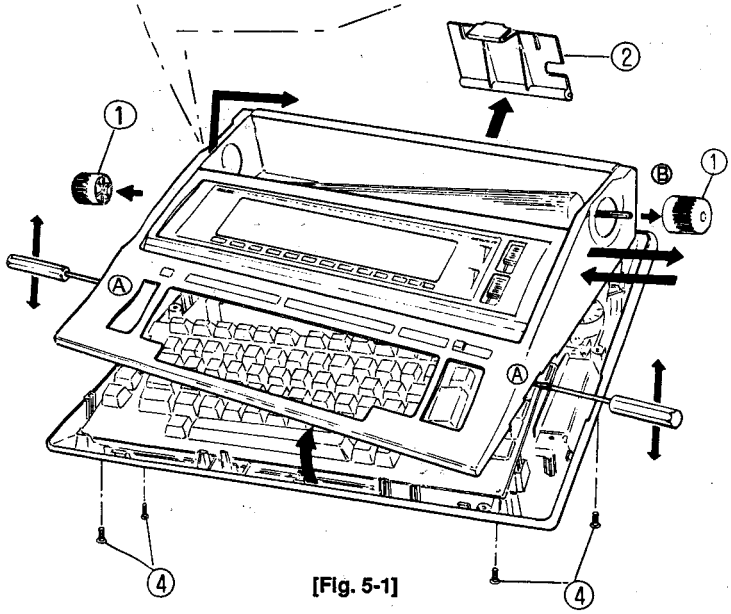
(1) Remove platen knob L and R ①.

(2) Remove four screws ④.

(3) Use two (–) screwdrivers and pick sections Ⓐ to open the upper and the lower cabinets.

[Fig. 5-2]





[Fig. 5-1]

(4) Lift the right side of the upper cabinet and remove from the platen shaft right side Ⓑ.

(5) Slide the upper cabinet to the left to separate it from the lower cabinet.

(6) Remove the display unit from the cable.

[Note for disassembly/assembly]

a. Before opening or assembling the upper cabinet, be sure to remove the display unit cable from the main PWB or attach it to the main PWB. (The display unit cable is assembled in the upper cabinet.)

b. As shown in Fig. 5-2, when opening or assembling the upper cabinet, be careful not to hit the PF holder spring ⑤ in the left side of the mechanism unit. (If the spring is stretched out, replace it with a new one.) (See Fig. 5-2.)

c. When installing the upper cabinet, carefully protect the LCD cable from being caught by the printer unit and the key top.

2. LCD unit (See Fig. 5-3.)

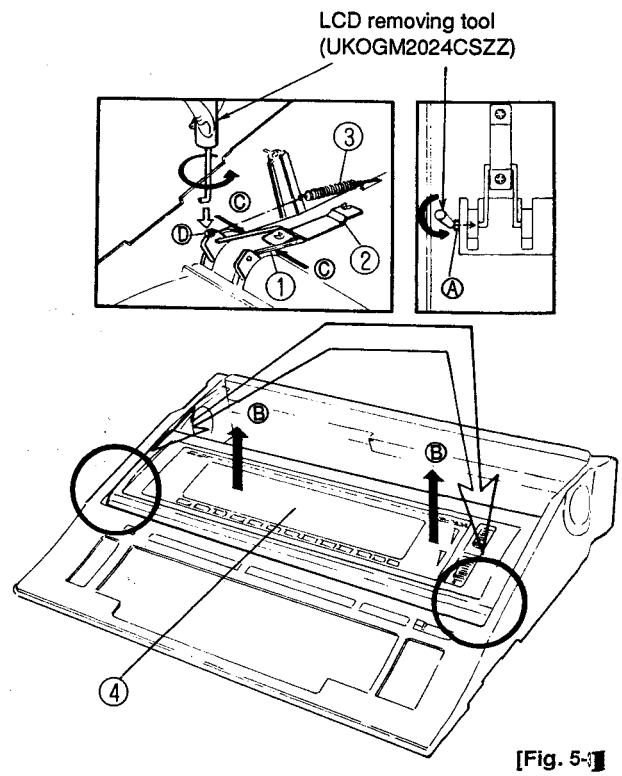
(1) Remove the upper cabinet. (See "1. Upper cabinet" above.)

(2) Place the upper cabinet upside down. Use the LCD removing tool (UKOGM2024CSZZ) to push projection Ⓐ, lift the LCD unit towards Ⓑ, and remove it from the guide section. (There are two projections in the both sides.)

(3) Move friction arm ① in the direction Ⓒ to remove it from LCD unit ④. (there are two friction arms in both side.)

(4) Remove the one side of tilt spring ③ from section Ⓓ of the LCD unit. (Two sides.)

(5) Remove LCD unit ④. At that time, remove also the cable from the LCD unit.



[Fig. 5-3]

[Note for disassembly/assembly]

a. Friction arm ① and friction spring ② are heavily greased with screw grease (UKOG-0185CSZZ). Be careful to the grease.

b. A heavy pressure on the liquid crystal glass may break the glass.

c. If friction spring ② is not greased with screw grease, be sure to apply about 0.2g of screw grease to the whole surface of friction spring ②.
(for details, refer to "Lubrication and greasing.")

3. LCD cabinet (Fig. 5-4)

(1) Remove the upper cabinet. (See "1. Upper cabinet.")

(2) Remove the LCD unit. (See "2. LCD unit.")

(3) Put the LCD unit upside down, and remove four screws ①.

(4) Insert a screwdriver into position Ⓐ to open the display cabinet B ②.

(5) Remove the four screws ⑪ and remove the stay angle ④. (Be careful that the installing direction differs in the PA-W1400 and the PA-W1410.)

(6) Use point Ⓓ as a fulcrum to lift section Ⓑ towards Ⓒ and remove back board ⑤. (Lift section Ⓑ towards Ⓒ in order not to make contact with CCFT (cool cathode ray tube) ⑧.

(7) Remove LCD unit ⑥ and volume knobs ⑬ and ⑭. (Handle with care. They are fragile.)

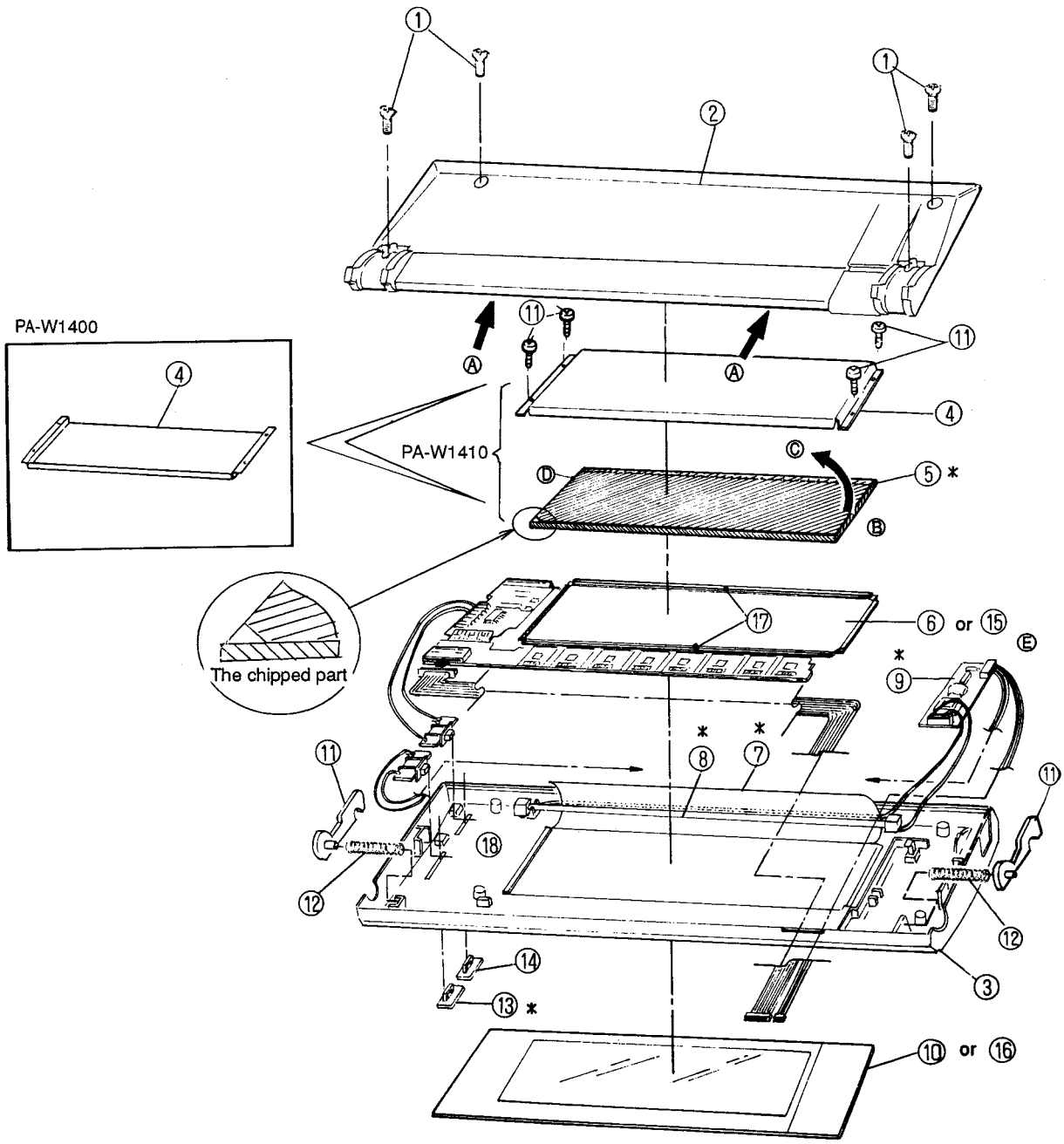
(8) Remove connector Ⓕ from invertor unit ⑨ and remove CCFT (cool cathode ray tube) ⑧.

(9) Remove two stay rubbers A ⑰ and stay rubber B ⑱.

(10) Remove the invertor unit ⑨ from two pawls on display cabinet A ③.

(11) Remove correction sheet ⑦.

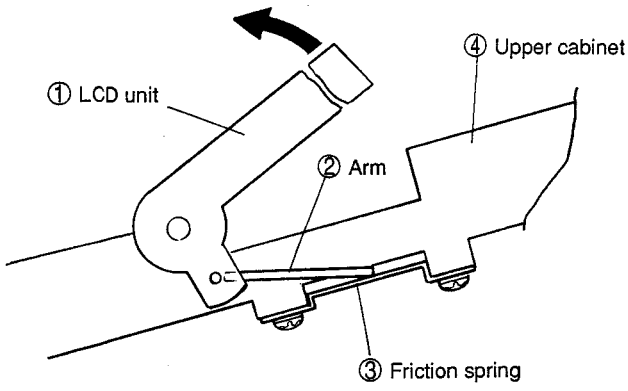
(12) Remove two tilt pins ⑪ and two tile springs ⑫ from display cabinet A ③.



[Fig. 5-4]

(Description on the tilt mechanism)

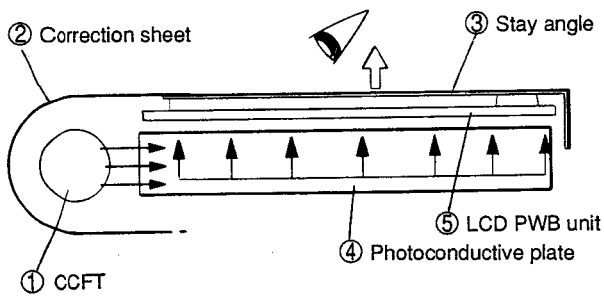
The tilt mechanism functions to set the LCD unit to a desired angle. LCD unit ① is liked with arm ② (the link shaft) and a friction is applied to arm ②.



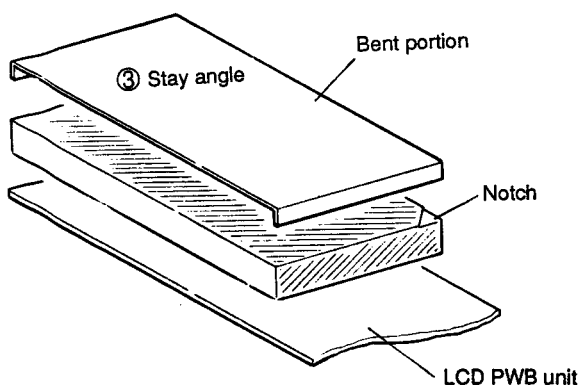
[Fig. 5-5]

(Descriptions on the backlight and the photoconductive plate)

- The PAW1410 employs the edge-light system backlight. The light emitted from CCFT (cool cathode ray tube) ① is radiated on the edge of the photoconductive plate to illuminate the LCD evenly.



[Fig. 5-6]



[Fig. 5-7]

Note: Be careful to the photoconductive plate mounting direction. The transparent surface must come onto the CCFT, and the notched surface must come onto the stay angle.

- The CCFT (cool cathode ray tube) is driven and controlled by the invertor unit.

(Note for disassembly/assembly)

a. Before servicing work, be sure to turn off the power source.

b. Be careful not to allow foreign materials to enter the unit.

c. Cover the photoconductive plate with the correction sheet to inhibit leakage of light.

d. Be careful to the mounting directions of the stay angle and the photoconductive plate. (refer to Fig. 5-5 and Fig. 5-6.)

e. Carefully treat the CCFT and the LCD unit because they are fragile.

4. Keyboard unit (Refer to Fig. 5-8.)

(1) Remove the upper cabinet. (For removing procedure, refer to [5]-1.)

(2) Put down the shaded portion of fixing pawl Ⓑ in the arrow direction and release the lock.

(3) Lift the keyboard in the arrow direction and remove it.

(4) Disconnect the keyboard flat cable Ⓔ and Ⓕ from the main PWB.

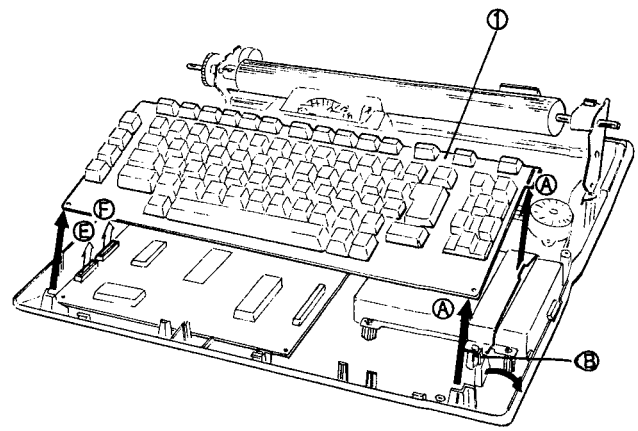
<Assembly procedure>

(1) Set the dent portion of the keyboard to fixing pawl Ⓐ.

(2) Two ribs are provided at the lower rear side of the board. Insert the ribs into holes Ⓒ and Ⓓ.

(3) Bend the shaded portion of pawl Ⓑ in the arrow direction and hang on the lock.

(4) Confirm insertion of the key angle projection.



[Fig. 5-8]

(Note for disassembly/assembly)

a. When the board is hanged on fixing pawl Ⓐ, do not rotate in direction of Ⓧ.

b. Do not bend fixing pawl Ⓑ excessively.

c. The flat cable terminal must not be folded.

d. Check that key angle ⑦ projection and section Ⓖ of keyboard unit ①.

5. Mechanical unit (Refer to Fig. 5-9.)

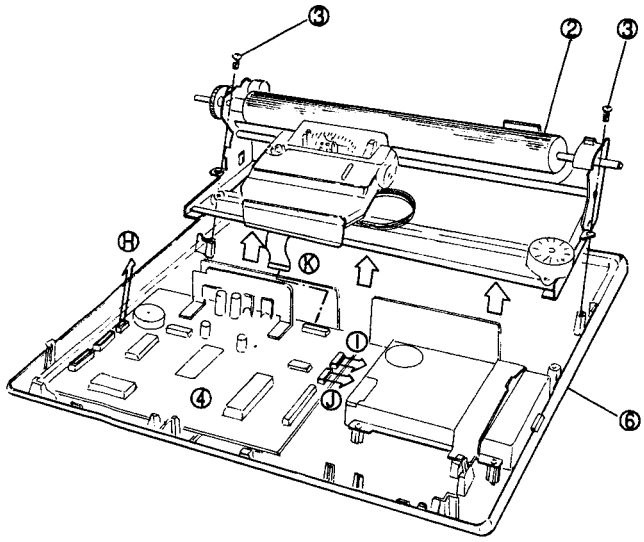
(1) Remove the upper cabinet. (For removal procedure, refer to [5]-1.)

(2) Remove keyboard unit ①. (For removal procedure, refer to [5]-4.)

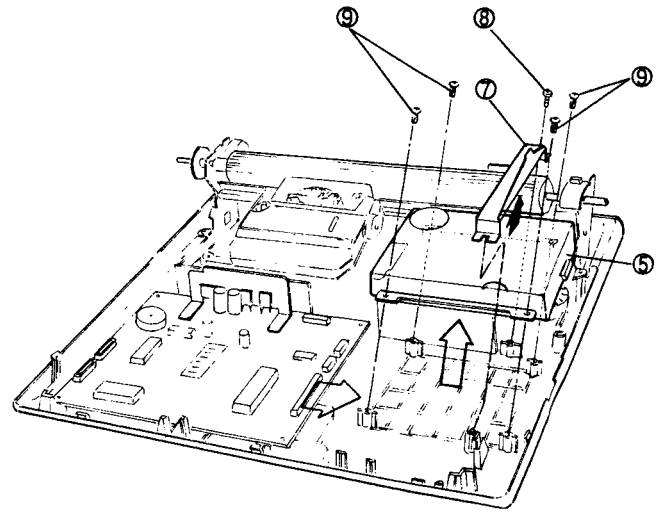
(3) Remove two screws ③ which are fixing mechanical unit ② to lower cabinet ⑥.

(4) Disconnect cable connectors Ⓗ, Ⓘ, Ⓙ, and Ⓚ (which are connected with main PWB ④) from the mechanical unit.

(5) Remove mechanical unit ②.



[Fig. 5-9]



[Fig. 5-11]

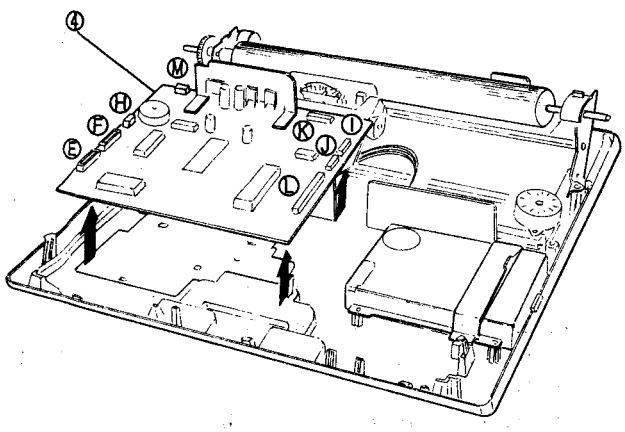
6. Main PWB (Refer to Fig. 5-10.)

(1) Remove the upper cabinet. (For removal procedure, refer to [5]-1.)

(2) Remove keyboard unit ①. (For removal procedure, refer to [5]-4.)

(3) Disconnect all the connectors Ⓗ, ①, Ⓙ, Ⓚ, Ⓛ, Ⓜ, Ⓔ, and Ⓕ from each unit.

(4) Remove main PWB unit ④.



[Fig. 5-10]

7. FDD unit (Refer to Fig. 5-11.)

(1) Remove the upper cabinet. (For removal procedure, refer to [5]-1.)

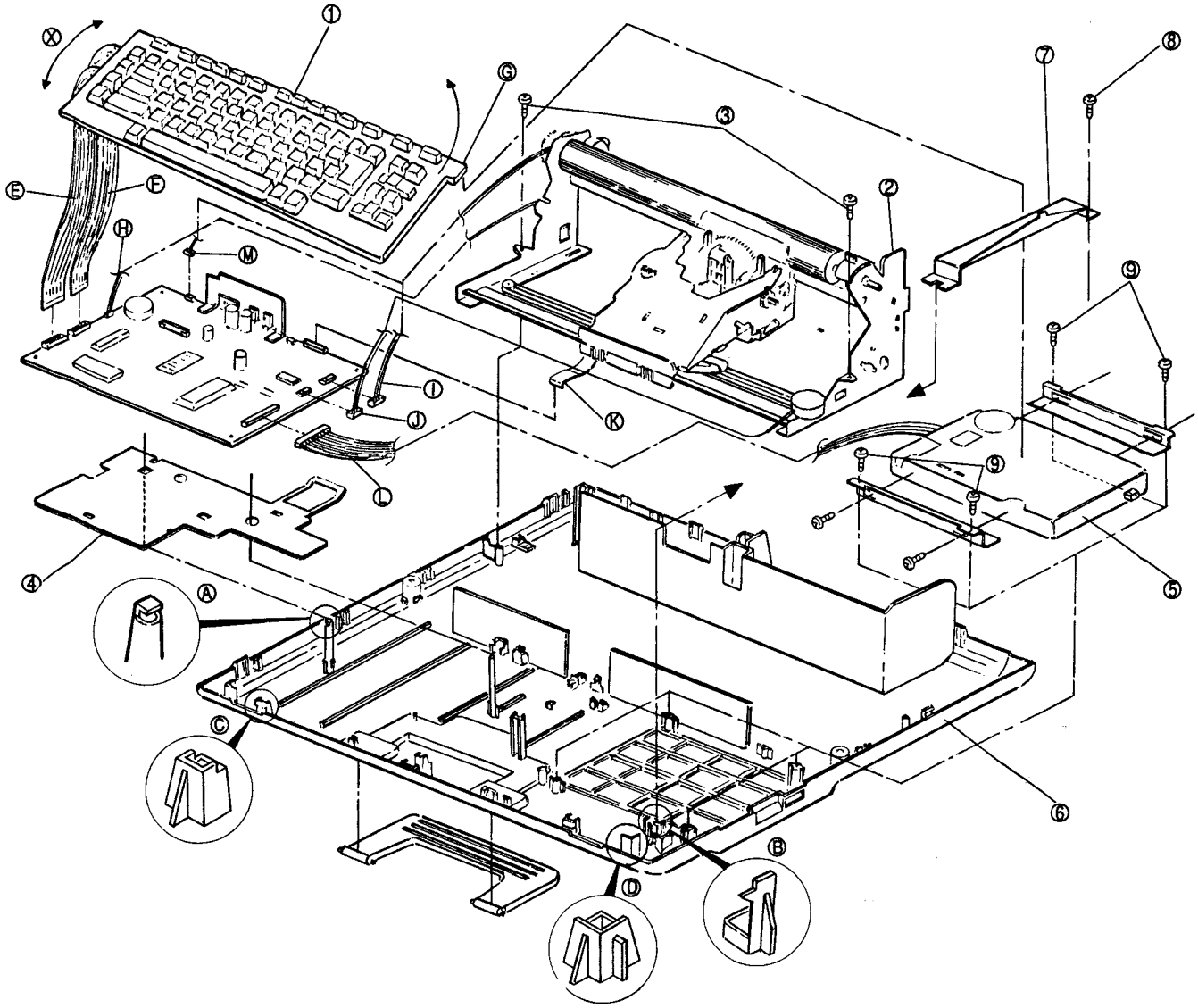
(2) Remove keyboard unit ①. (For removal procedure, refer to [5]-4.)

(3) Remove screw ⑧ and remove angle ⑦.

(4) Disconnect cable connector Ⓛ of the main PWB.

(5) Remove four screws ⑨.

(6) Remove FDD unit ⑤.



(General note for disassembly/assembly)

The LCD unit is supplied as the assembly with the display cabinet for convenience of transit and storage.
Therefore, when replacing the LCD unit, the other components of the assembly such as the display cabinet (A), the stay angle, two stay rubbers A, stay rubber B, four screws are also supplied. For disassembly/assembly, refer to the Parts Guide.

8. Mechanical parts

8-1. Paper feed mechanism

8-1-1. Platen and pressure rollers (Ref. to Fig. 5-12)

Disassembly procedure

(1) Remove the top cabinet assy, in reference to paragraph upper cabinet assy.
(2) Press the platen ② in the arrow direction (A) and remove it from the frame ⑫ as shown with the arrowhead (B).
(3) Lift the feed roll holder ④ up in the arrow direction (C) to remove.
(4) Remove the release spring ⑥, then remove the feed roll holder support ⑤.

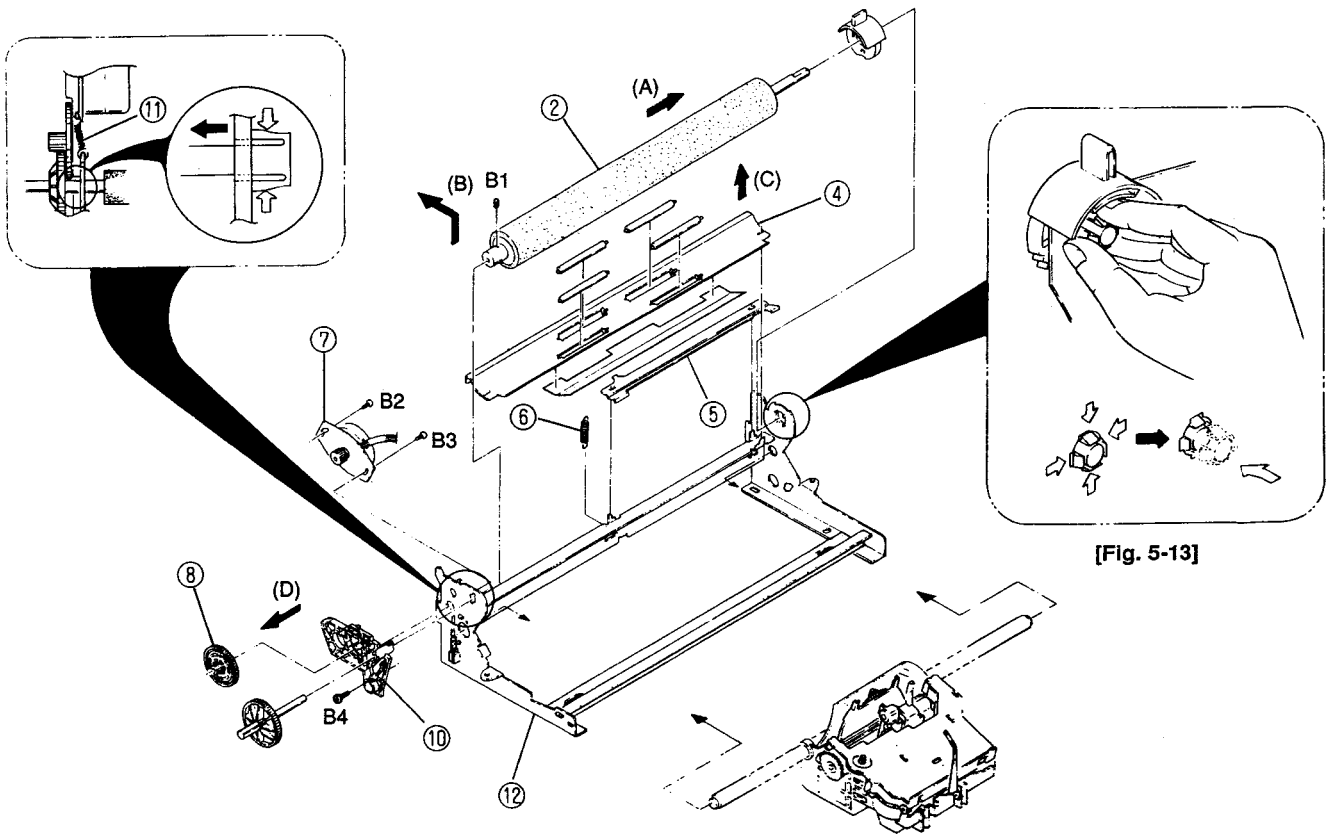
Reassembly procedure

Observe the reverse sequence of the disassembly procedure.

8-1-2. Paper feed motor and its gear train (Reference to Fig. 5-14)

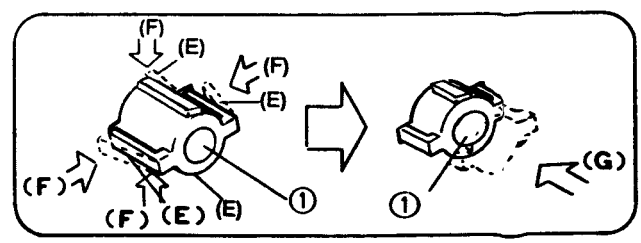
Disassembly procedure

(1) Remove the top cabinet assy, in reference to Paragraph upper cabinet assy.
(2) Remove the platen, in reference to Paragraph 8-1-1 Platen and pressure rollers.
(3) Remove the paper feed motor cable from the control PWB.
(4) Remove the two paper feed motor screws (B2) and (B3), then remove the paper feed motor ⑦ from the frame ⑫.
(5) Pull the idler gear ⑧ in the direction of the arrow (D) to remove it from the frame ⑫.
(6) Remove the PF spring ⑪ and the screw (B4) from the frame ⑫.
(7) As shown in Fig. 5-14 press the latch (E) of the lever ① with fingers in the direction of (F) while holding the PF holder ⑩, and push it in the direction of the arrow (G) to remove both the PF holder ⑩ and the lever ①.



[Fig. 5-13]

[Fig. 5-12]



[Fig. 5-14]

8-2. Carriage unit

Disassembly procedure

(1) Remove the mechanical unit.
For details, refer to paragraph [5]-5. Mechanical unit.

(2) Remove the PF holder screw ② on the left side of the mechanical frame ①.

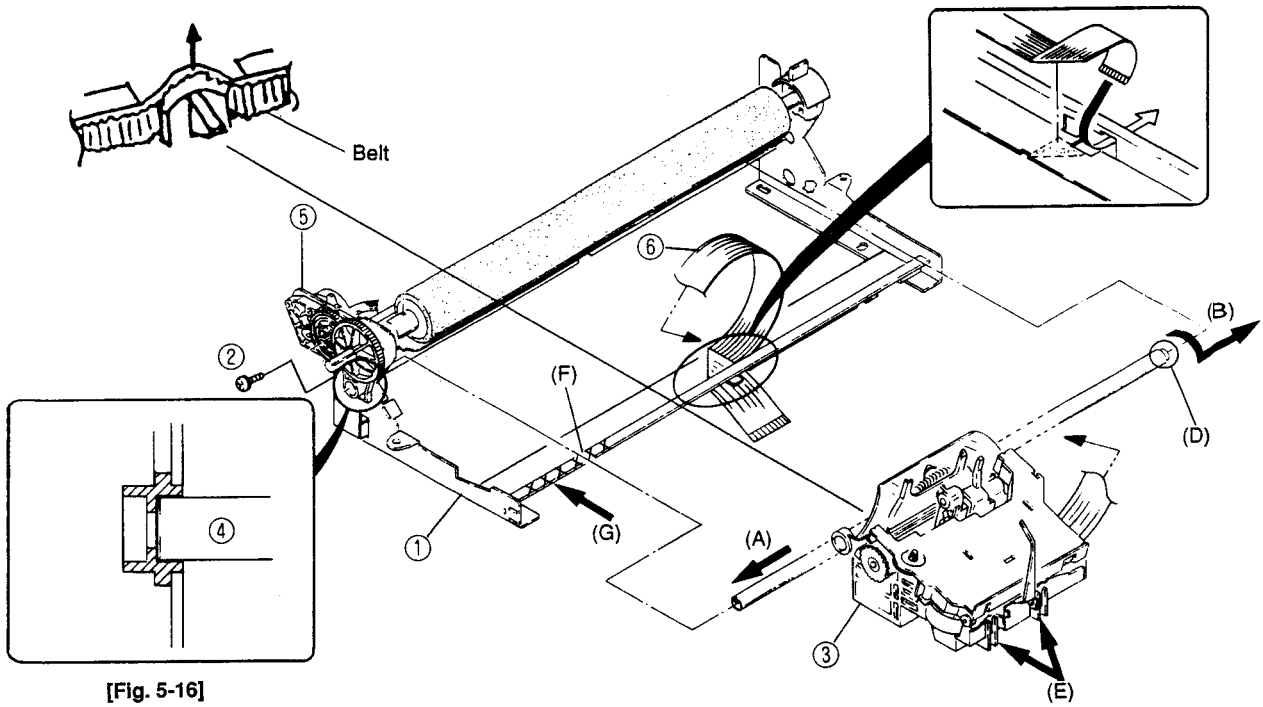
(3) Remove the belt in the arrow direction from the timing belt junction on the back of the carriage unit. If there was any difficulty, loosen the carriage motor frame holding screw and somewhat release the belt tension.

(4) Move the carriage (3) to the left side.

(5) While pushing the slide shaft ④ to the left (arrowhead A), pull out the right side of the shaft from the mechanical frame ① in the arrowhead B, then remove the carriage ③.

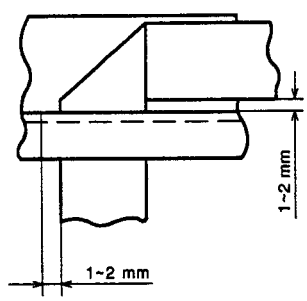
Reassembly procedure

Observe the release sequence of the disassembly procedure.



[Fig. 5-16]

[Fig. 5-15]



[Fig. 5-17]

NOTE 1) Avoid separating the carriage cable ⑥ from the main frame as much as situation allows. It will weaken the bonding strength of the double tack tape (Fig. 5-18).

2) When reassembling, make sure that the slide shaft ④ is firmly engaged in the slit of the PF holder ⑤ (Fig. 5-16) Note the installing direction of the slide shaft ④. The side with the ledge must be on the right side as shown in (D) in Fig. 5-15.

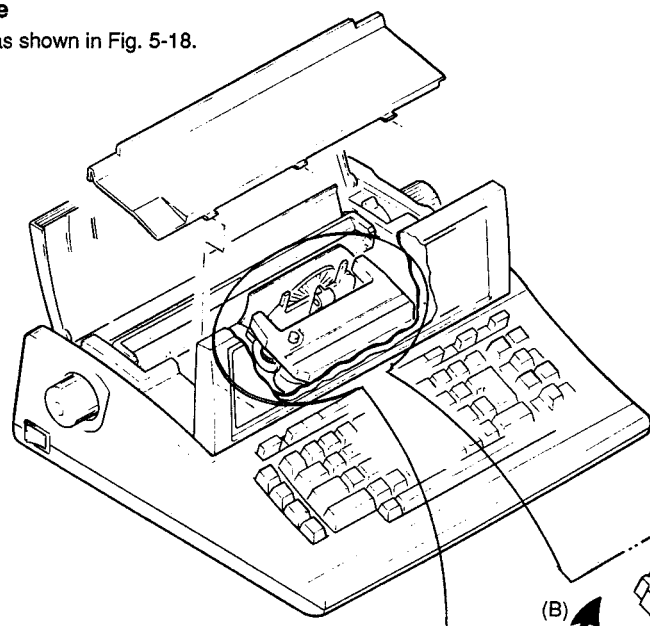
3) To avoid smearing your fingers with grease, you must first clean away grease on the slide shaft ④ and the front side of the mechanical frame. After the job has been completed, be sure to lube it with grease. Use the grease specified in Paragraph [1]-(5).

4) When reassembling the carriage unit ③ to the main frame, move the carriage unit ③ all the way to the left in reference to the frame, insert the slide shaft, then install it on the mechanical frame. The tab (E) must be inserted from the arrow direction (G) so that it should engage in the mesh part (F) of the mechanical frame.

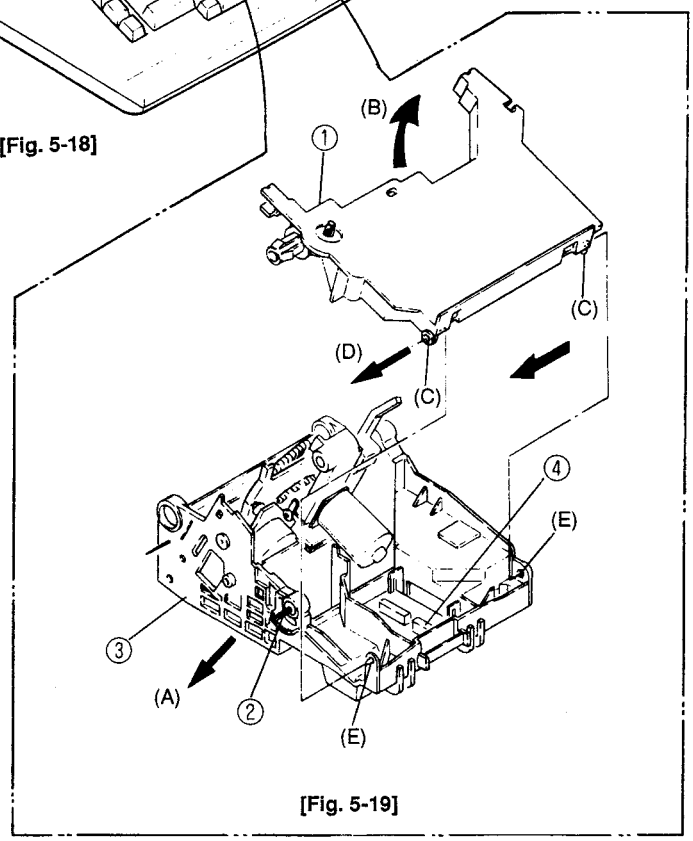
8-3. Ribbon holder unit

Disassembly procedure

(1) Open the top cabinet as shown in Fig. 5-18.



[Fig. 5-18]



[Fig. 5-19]

(2) As shown in Fig. 5-19, pull out the adjust pin ② in the arrow direction (A) and lift up the ribbon holder unit ① in the arrow direction (B).

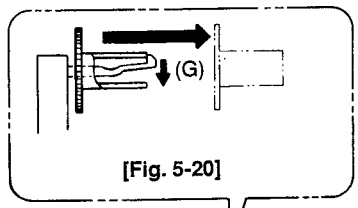
(3) Remove the section (C) of the ribbon holder unit from the section (E) of the carriage base ③ as shown with the arrowhead (D).

(4) Separate the ribbon holder unit ① from the carriage body.

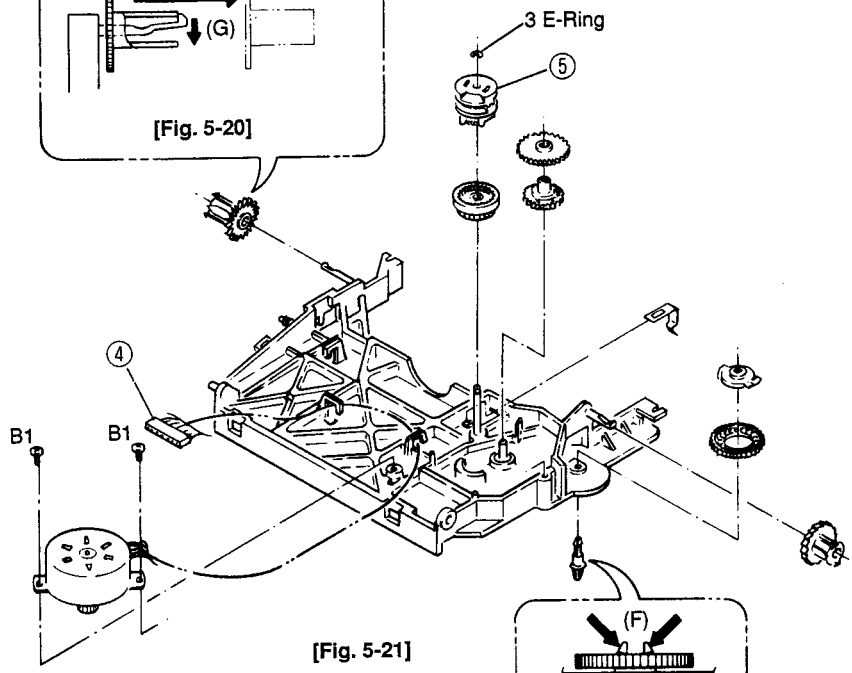
(5) Unfasten the 6 pin RF motor connector ④ which connects the carriage base unit with the ribbon holder unit.

(6) Remove the cam unit ⑤ (3 E-rings).

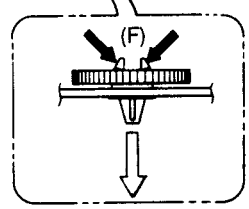
* See Fig. 5-21 for disassembly and re-assembly of the cam



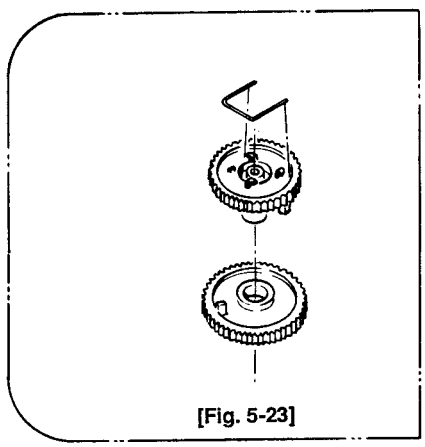
[Fig. 5-20]



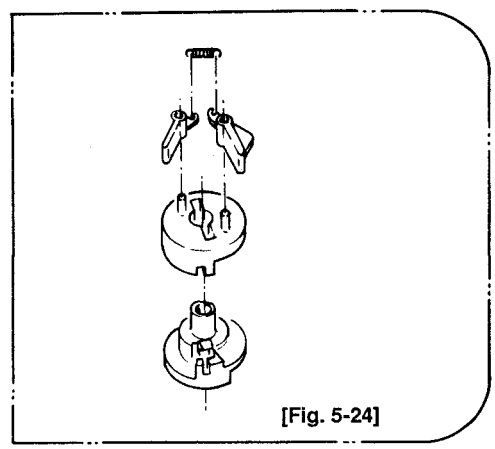
[Fig. 5-21]



[Fig. 5-22]



[Fig. 5-23]



[Fig. 5-24]

(7) Remove the ribbon motor.

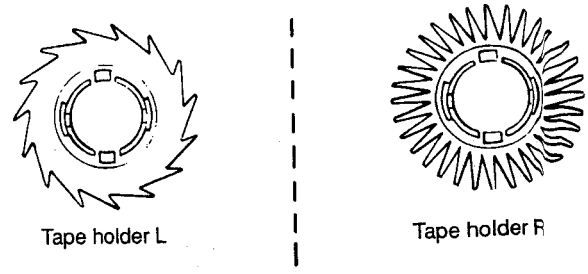
(8) Remove the idle gear unit. See Fig. 5-23 for disassembly and re-assembly.

(9) Push the ribbon takeup knob in the arrow direction and remove it. Note that the RF-ratchet and the RF-drive gear will come away.

(10) To remove the tape holder (R, L), push the end of the shaft in the arrowhead (G) and remove it, with a minimum distance of pushing to avoid possible breakage in the shaft.
To re-assemble, simply push it in until it locks.

Observe the reverse sequence of the disassembly procedure, with attention to the following.

(a) Because there are two kinds of rift-off tape holders, L and R, they must be installed in their proper location. They can be identified by the size and shape of the teeth. (See Fig. 5-25)



Tape holder L

Tape holder R

[Fig. 5-25]

* Reference to Fig. 5-19, Fig. 5-26.
To replace the ribbon holder unit to the carriage base, the pin will automatically lock when the reverse sequence of the disassembly is done (D, B), in case the cam is on its home position (print standby position). If it is on the correct position, it will need to do the reverse sequence of (D), (B), and (A). If the pin should rest over the cam where not slit is, it may lock. In this case, manually rotate the cam or make sure that the pin is completely engaged in the slit.

[Fig. 5-26]

8-4. Motor plate unit (Fig. 5-27)

Disassembly procedure

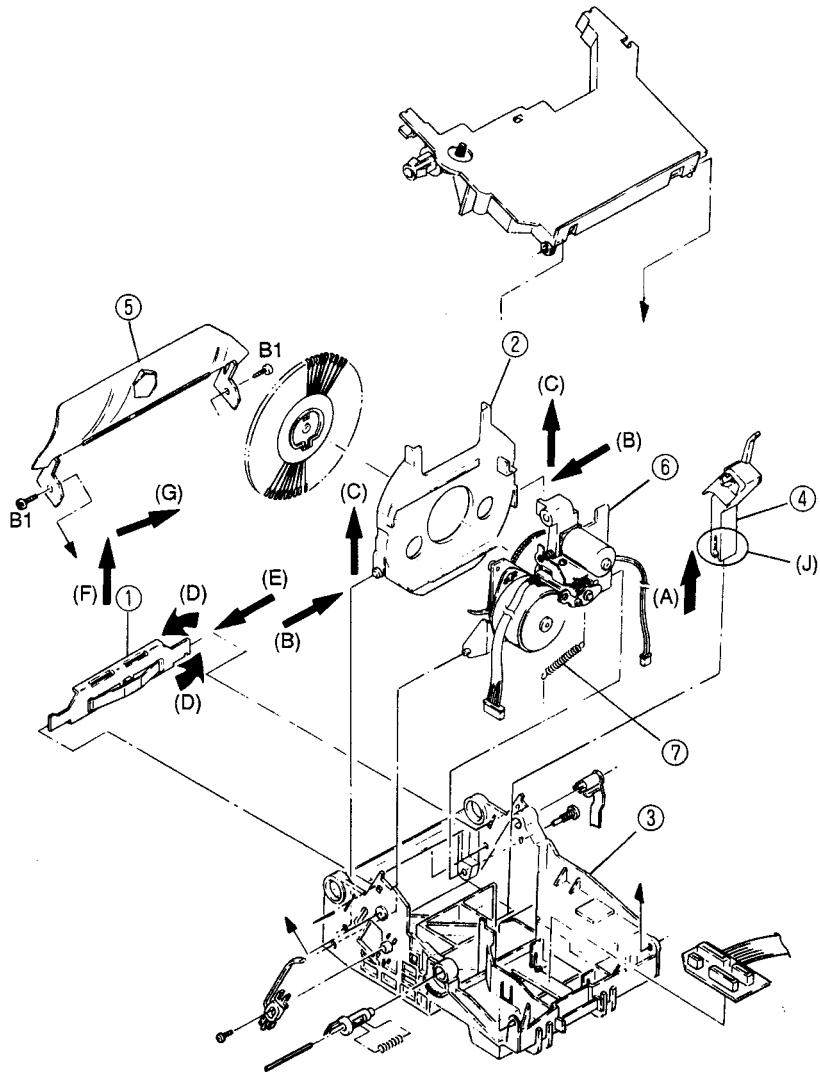
(1) Remove the mechanical unit.
For details, refer to paragraph [5]-5. Mechanical unit.

(2) Remove the carriage unit. For details, refer to paragraph 8-2, Carriage unit.

(3) Remove the ribbon holder unit.
For details, refer to paragraph 8-3, Ribbon holder unit.

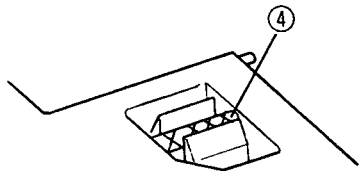
(4) Pull out the wheel release lever ④ in the arrow direction (A).
It will come out easily when pushed up with your fingertips Fig. 5-28.

(5) Remove two screws (B1) that hold the card holder ⑤, then remove the card holder ⑤.



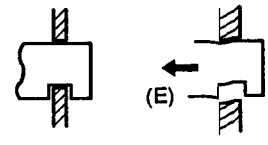
[Fig. 5-27]

Inset the top end (J) of the relase ledge ④ to this location of the carriage base.



[Fig. 5-28]

[Fig. 5-29]



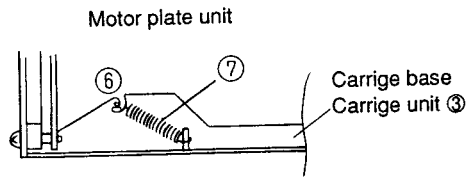
[Fig. 5-30]

(6) Rotate the right side of the printwheel spring angle ① in the direction D (Fig. 5-27, Fig. 5-30), slide to left (E) (Fig. 5-27, Fig. 5-30), then take it up towards the right (Fig. 4-20, (F), (G)).

(7) Remove the printwheel guide ②. Push the shaft towards the inside (B) and remove it up (C).

(8) Remove the motor plate spring ⑦ from the carriage unit ③. (Fig. 5-27, Fig. 5-31)

(9) Remove the motor plate unit ⑥ from the carriage unit ③.

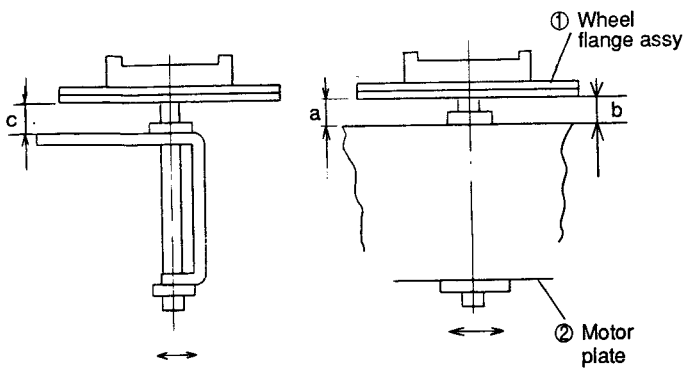


[Fig. 5-31]

(11) Hold two locations of the section (C) with your fingertips and remove the wheel gear ⑦ from the wheel flange ⑧ in the arrow direction (B). Next, remove two wheel flange spring ⑨ that engaged in the slit of the wheel flange ⑧.

(10) Now, see Fig. 5-33.
Remove the E-ring (E1) and pull out the wheel flange assy ① in the direction of arrowhead (A).
Leave the wheel bearing W unremoved, for, it had been factory fixed to its precise position using the special tool. It is highly recommended to replace it by a whole unit. In case only a single parts has to be replaced anyway, the location of must be marked on the motor plate or make sure after the installation was complete that the wheel flange shaft stands vertical in front of the motor plate. Unless it has been installed on the correct position, it may result in a ribbon or tape transport failure or impede 3mm adjustment because the printwheel fails to be collateral with the motor plate surface.

Adjustment method
Move the bearing in the arrow direction ↔ and fix it at the point where "a=b" is established. The W flange must be collateral with the motor plate when "a=b=c".



[Fig. 5-32]

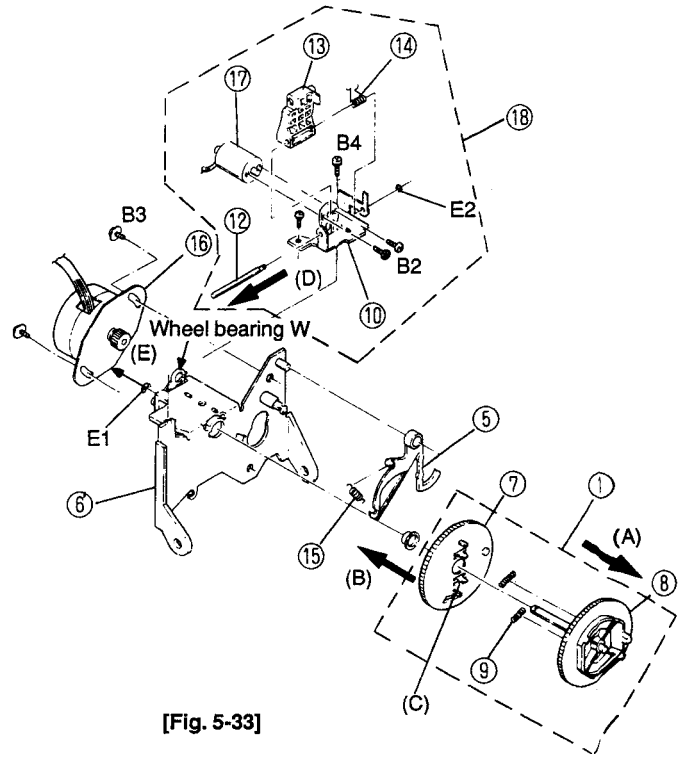
(12) Remove the zero sense spring ⑮ and remove the zero sense lever ⑤ from the motor plate ⑥.

(13) Remove two screws (B3) and remove the wheel motor ⑯.

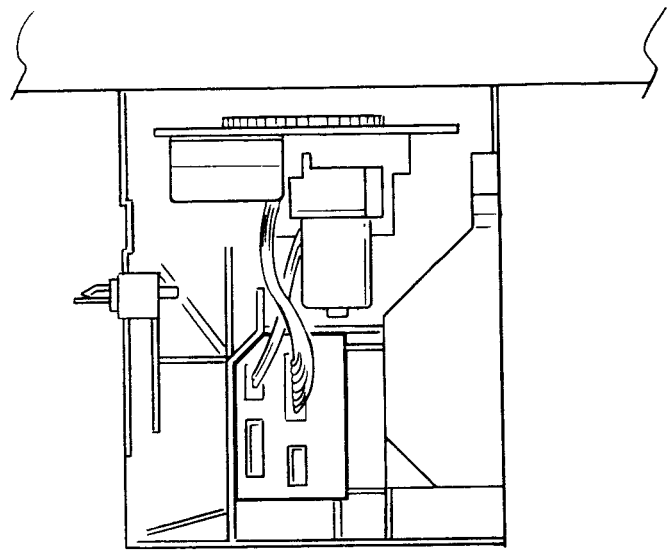
(14) Remove two screws (B4) and remove the hammer unit ⑱.

(15) Remove the E-ring (E2), pull out the hammer shaft ⑫ from the hammer plate ⑩ in the arrowhead (D), then remove the hammer spring ⑪ and the hammer ⑬.

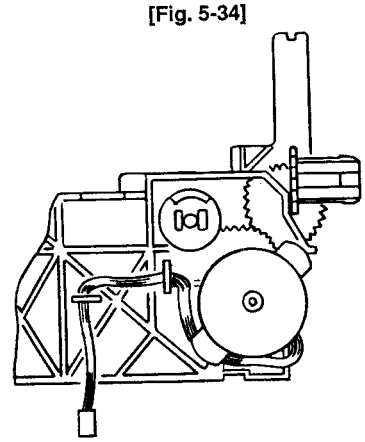
(16) Remove two screws (B2) and remove the hammer solenoid ⑰ from the motor plate ⑥.



[Fig. 5-33]



[Fig. 5-34]



[Fig. 5-35]

Reassembly procedure

Observe the reverse sequence of the disassembly procedure.

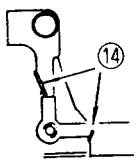
NOTE 1) See Fig. 5-28 for installing location of the wheel release lever ④.

2) See Fig. 5-36 for the installing location of the hammer spring ⑭.

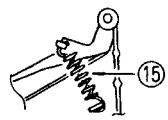
3) See Fig. 5-37 for the installing location of the zero sense spring ⑮.

4) See Fig. 5-34 for the installing location of the hammer cable and wheel motor cable.

5) See Fig. 5-35 for the installing location of the ribbon feed motor cable.



[Fig. 5-36]



[Fig. 5-37]

CAUTION 1) After replacing a component, the lubrication area must be lubed with grease. (Use the grease specified in Paragraph)

2) Re-adjustment is necessary after the reassembly. (For details, refer to Paragraph, Adjustments.)

8-5. Carriage base unit

Disassembly procedure

(1) Remove the mechanical unit.
For details, refer to Paragraph [5]-5, Mechanical unit.

(2) Remove the carriage unit.
For details, refer to Paragraph 8-2, Carriage unit.

(3) Remove the ribbon holder unit.
For details, refer to Paragraph 8-3, Ribbon holder unit.

(4) Remove the motor plate unit.
For details, refer to Paragraph 8-4, Motor plate unit.

(5) Now, see Fig. 5-38.

(6) Push the pawl of the lever latch ④ in the direction (G) and remove it towards the direction (H).

(7) Push four pawls of the tape feed lever ⑤ in the direction (K) and remove the pawls in the direction (L).

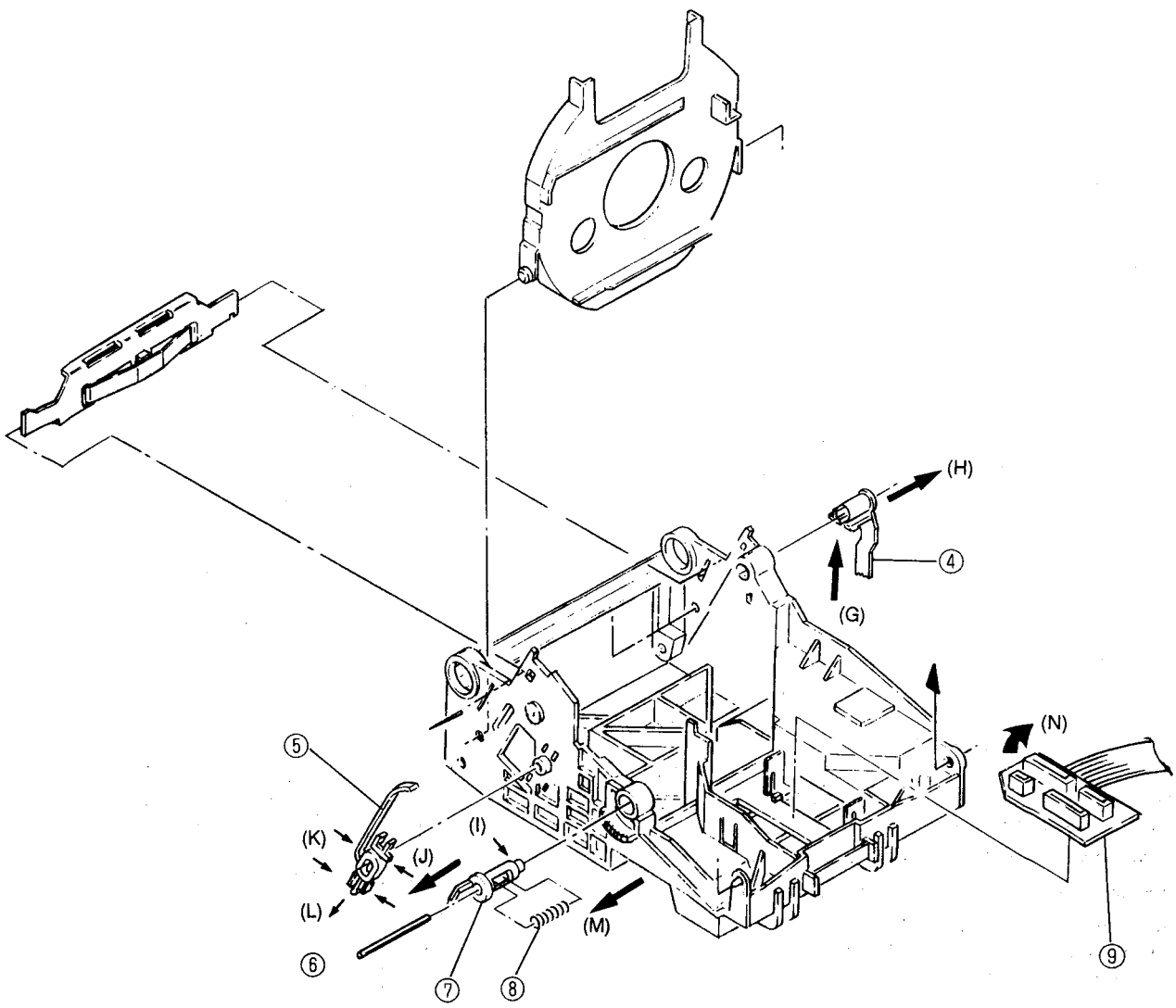
(8) Push the pawl of the ⑦ R adjuster in the direction (I) and remove it in the direction (J).

(9) Push the pawl of the ⑩ carriage base in the direction (M), release from the lock of the ⑨ carriage board, and remove it in the direction (N).

Reassembly procedure

Observe the reverse sequence of the disassembly procedure.

Note: See Fig. 5-34, 5-35 for routing of cables from motors and hammer.



[Fig. 5-38]

8-6. Carriage motor and belt

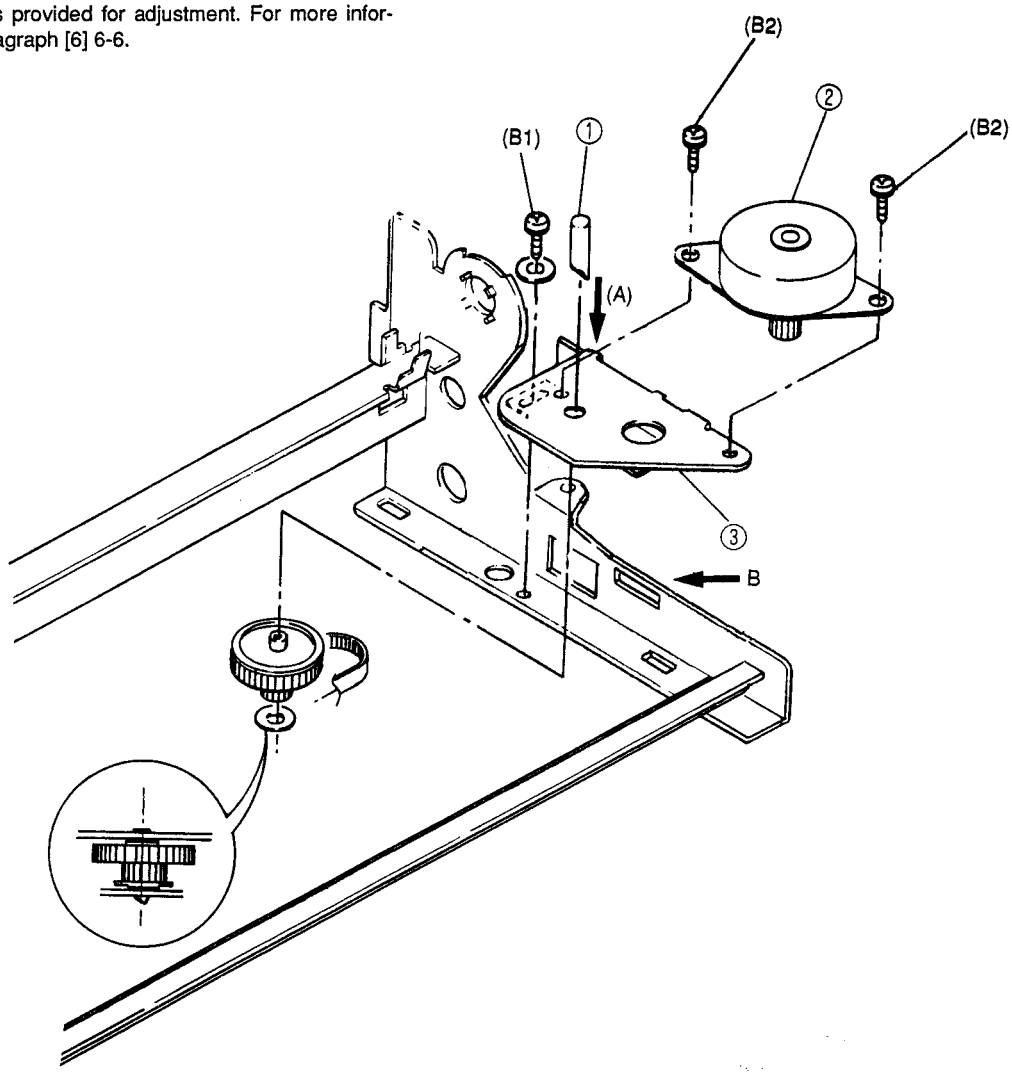
Disassembly procedure

1) Loosen the screw B1, remove the hook B to the main frame, and remove the carriage motor frame unit ③.
2) Remove three screws (B2 x 2) and remove the carriage motor ②.
3) After the shaft ① was removed, all components now be ready to be disassembled.

Re-assembly procedure

Observe the reverse sequence of the disassembly procedure.

NOTE: 1) The screw B1 is provided for adjustment. For more information, see Paragraph [6] 6-6.



[Fig. 5-39]

9. Power supply

9-1. Power supply unit (Reference to Fig. 5-39 ~ 43)

Disassembly procedure (Refer. to Fig. 5-42)

(1) Remove the top cabinet assy, in reference to paragraph [5]-1, upper cabinet assy.

(2) Remove two screws (B1) that hold the transformer ③ to the bottom cabinet ①.

(3) Remove the AC switch ④ and the AC cord ② from the bottom cabinet ①.

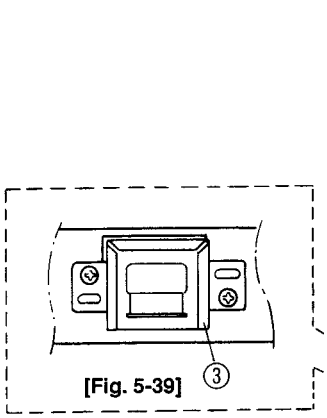
Reassembly procedure

Observe the reverse sequence of the disassembly procedure.
Be sure that the AC cord ⑦ is installed correctry at its section (A), see Fig. 5-43.

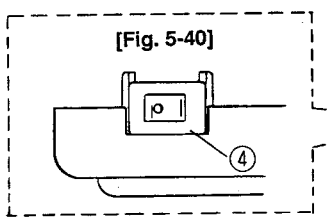
CAUTION 1) When replacing the transformer ③ to the bottom cabinet ①, fasten the screw perpendicular to the bottom cabinet ③. See Fig. 5-39.

2) When replacing the AC switch ④ to the bottom cabinet ①, the switch ON side must be at the back of the bottom cabinet ①. See Fig. 5-40.

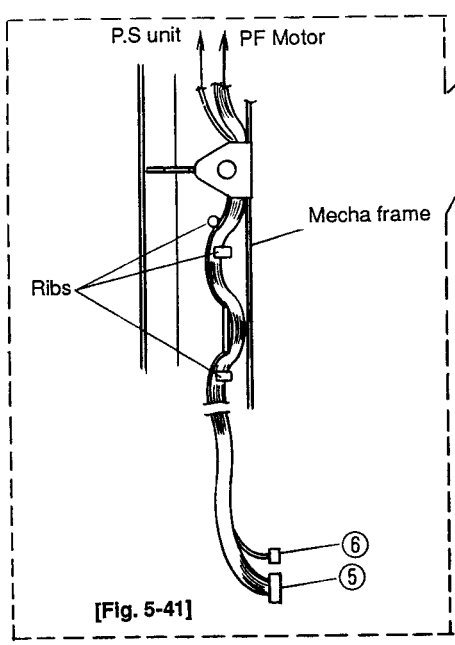
3) The cable ⑤ from the PF motor and the cable ⑥ from the PS unit must be routed around the ribs of the bottom cabinet ①. See Fig. 5-41.



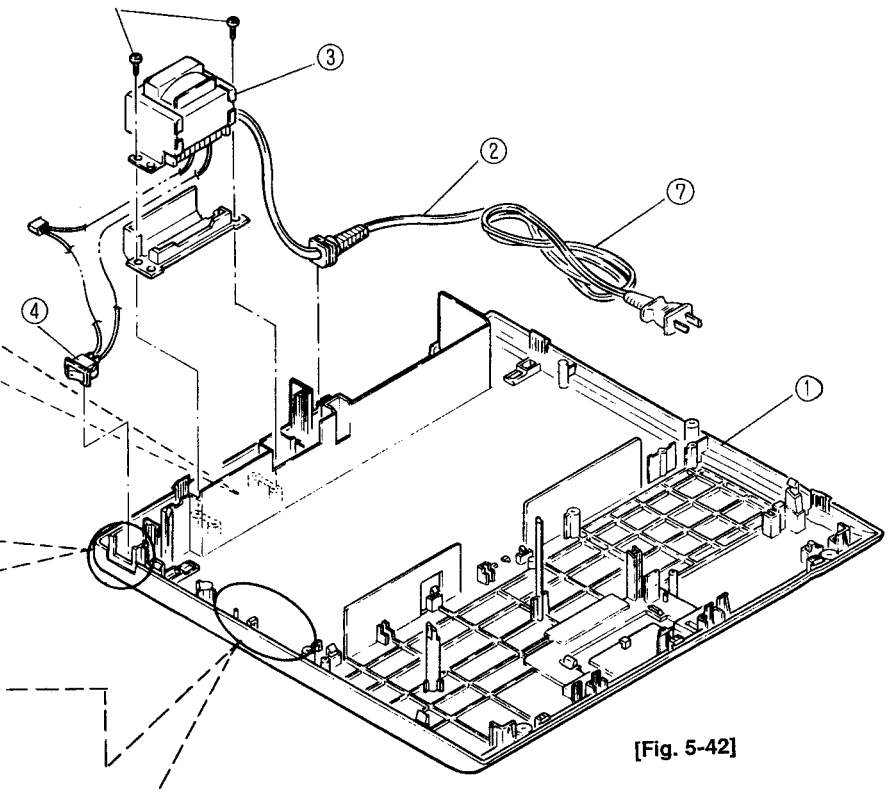
[Fig. 5-39]



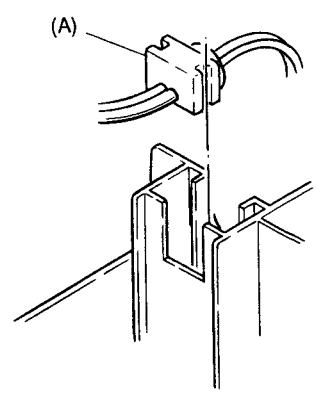
[Fig. 5-40]



[Fig. 5-41]



[Fig. 5-42]



[Fig. 5-43]

9-2. Power supply unit connection

Reassembly procedure

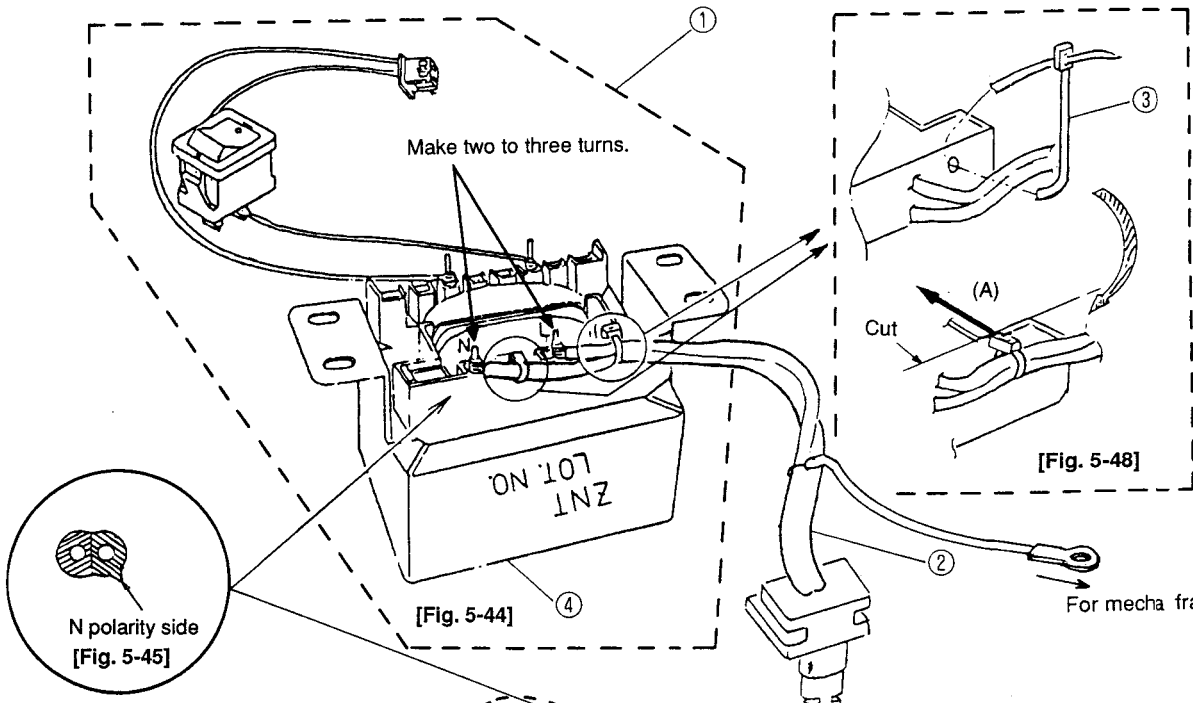
Follow the direction next to connect the power supply unit ① with the AC cord ②.

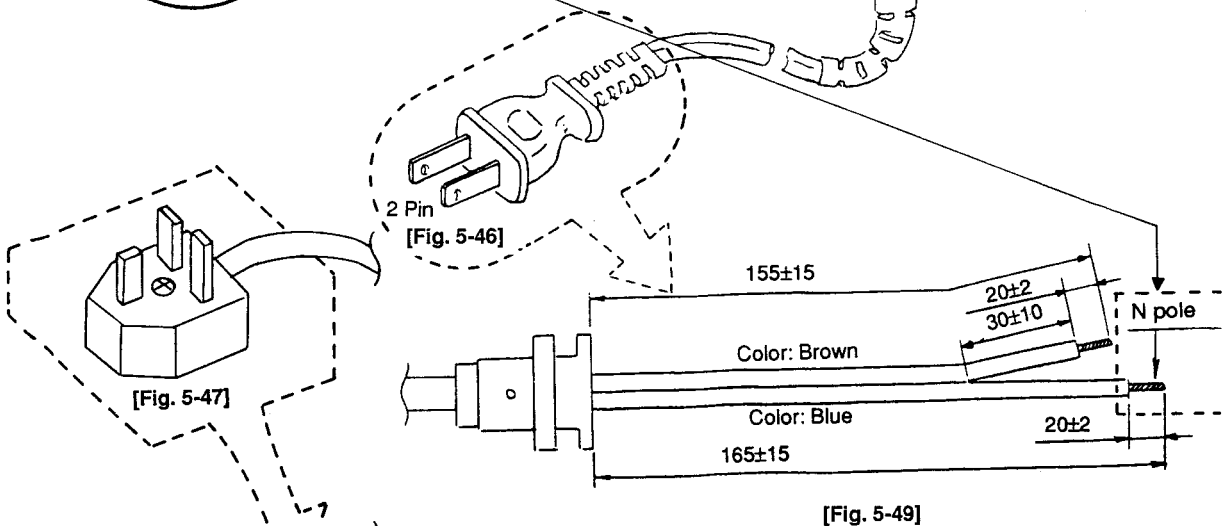
(1) Because the end of the AC cord is cut as shown in Fig. 5-49 and Fig. 5-50, make two or three turns of the wire around the transformer terminals ④ L and N as shown in Fig. 5-44, then bind the wires with solder. (For the polarity L is discriminated from R on the AC cord ②, you must confirm the polarity before binding the wire with solder. See Fig. 5-45, Fig. 5-49 and Fig. 5-50.

(2) After binding the AC cord ① wires, hold it to the transformer ④ using the wiring tie ③, as shown in Fig. 5-48.

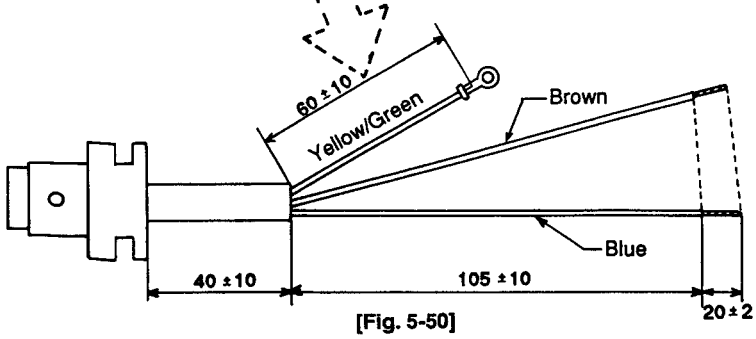
CAUTION 1) Note that a different shape plug (Fig. 5-46 and Fig. 5-47) is used according to the destination.

2) In the 110V and 120V power supply unit, the AC cord ① and the wiring tie ③ are included. In the 127V, 220V, and 240V power supply unit, the AC cord ② and the wiring tie ③ are not included.





[Fig. 5-49]



[Fig. 5-50]

Memo

Side N	Blue
Side L	Brown
Earth	Yellow/Green

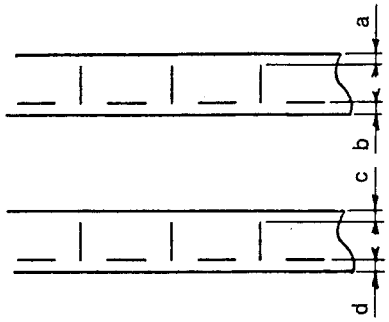
[6] ADJUSTMENT

When disassembly and reassembly are made the following adjustments should be performed in order to assure beautiful print quality.

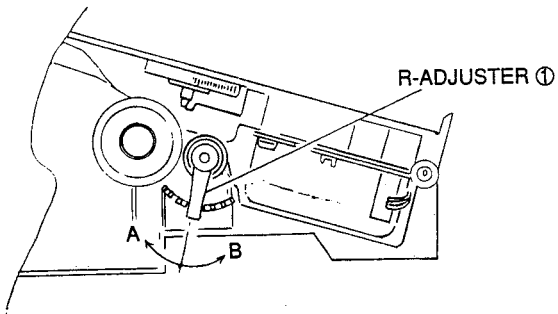
(1) Print ribbon height adjustment
(2) Print wheel home position adjustment
(3) Platen/print wheel spoke clearance adjustment
(4) Platen/paper holder clearance adjustment
(5) Hammer height adjustment
(6) Belt tension adjustment
(7) Indication adjustment

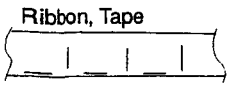
6-1. Print ribbon height adjustment

1. Print ruled lines and underlines alternately, and erase them.
2. Check the trace of a correctable ribbon and the erasing trace of a correction tape. (Fig. 6-1)
3. If the traces are outside the reference value, move R-adjuster (1) to A or to B and move the ribbon holder up and down so that the traces are within the specified range.
   Reference value: a ≧ 0.5mm, b ≧ 0.5mm, c ≧ 0.5mm, d≧ 0.5mm
4. When a print as shown in Fig. 6-2 is obtained.
5. When a print as shown in Fig. 6-3 is obtained.
   Move R-Adjuster (1) in direction of arrow A.
6. Repeat procedures 1 and 2 to check again.
   Adjust so that the measured values becomes as a = b = c = d.

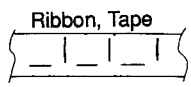


[Fig. 6-1]





[Fig. 6-2]



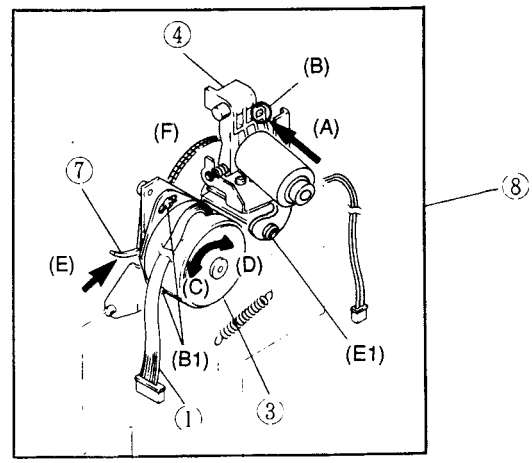
[Fig. 6-3]

6-2. Printwheel home position adjustments

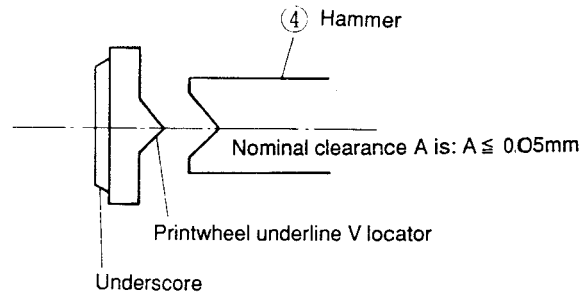
The home position of the printwheel must be adjusted after the printwheel is disassembled.

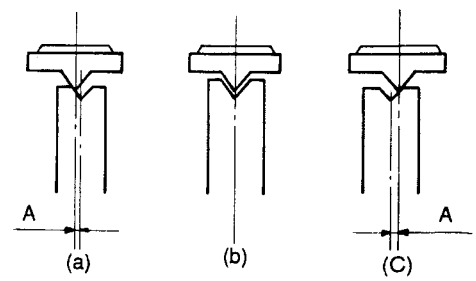
6-2-1. Checking initial state and making fine adjustment (Fig. 6-4, Fig. 6-5)

(1) Set the printwheel in the carriage
(2) Turn power on. After completion of the initialization, push the point (B) straight in the arrow direction (A) and check the location of the hammer with the underscore V locator (Fig. 6-5)



[Fig. 6-4]





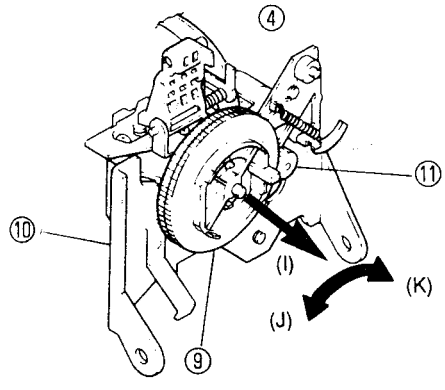
[Fig. 6-5]

(3) If the clearance were not over 0.05mm after the check in above ②, loosen the wheel motor ③ holding two screws (B1) with the phillips screwdriver and the printwheel wrench (UKOG-5013BCZZ). Shift the wheel motor ③ slightly in the direction (C) or (D). Make adjustment all over again from Step ① so that it should be in the range of A. Tighten two screws to complete the adjustment.

(4) If adjustment was not possible even if the wheel motor ③ is moved in the arrow direction (C) or (D), do the following adjustment.

(5) Primary adjustment (not needed if steps ① to ③ have been complete)

1) Remove the motor plate unit in reference to Paragraph 8-4, ① to ⑧. Keep the wheel motor connector ① and the carriage unit ② cable to remain connected.
2) Remove the E-ring (#1).
3) Hold the motor plate ⑧ with the side (F) facing up. (Push the wheel lever ⑦ 2mm towards the arrow direction (E).)
4) Set the printwheel in the motor plate.
5) From the left side of the mechanical unit, unfasten the carriage home position sensor 2-pin connector (CN3) that connected to the main control PWB with such as a pin in order to allow manual movement of the carriage home position sensor after power on.
6) Turn the power on.
the printwheel starts to rotate to sense the wheel home position. Release your finger from the wheel lever ⑦ after the wheel position has been sensed.
7) In order to decrease the clearance between the top end of the hammer ④ and the printwheel underline V location, pull out the wheel gear ⑨ in the arrow direction (I), with care not to move the pinion gear ⑪ of the wheel motor. Move the wheel gear one tooth in the arrow direction (J) or (K) and push in the wheel gear ⑨ so that it should engage with the pinion gear ⑪.
8) Al though the wheel motor is locked while the power is on, the pinion gear may be likely to move if forced because it is not locked firmly, So, pay attention not to move the pinion gear ⑥. If moved, turn power off and do the adjustment all over again from Step 1).
9) When Step 7) has been completed, replace the E-ring (E1) and turn the power off.
10) With the above procedure, the primary adjustment has been complete. In order to confirm, do Step 6) once again to check that the clearance is now less (within a fine adjustment range) between the printwheel underline V locator and the hammer slit. You may now proceed to do the fine adjustment.
11) Remove the printwheel and replace the motor plate unit in the carriage unit. See Paragraph 8-4, Motor plate unit.
12) Do Steps 1) through 3).

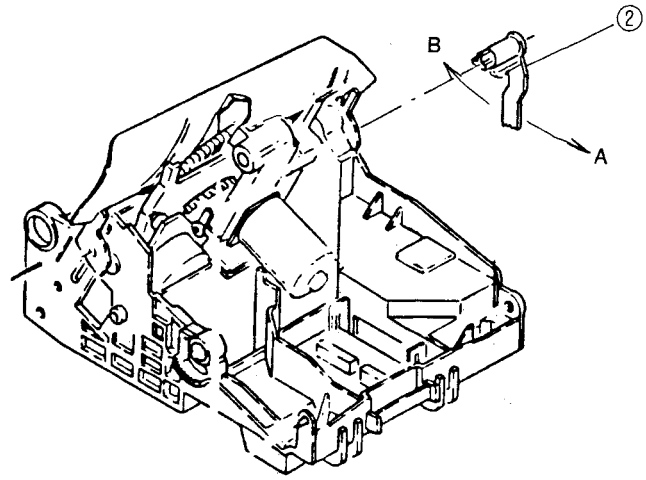


[Fig. 6-6]

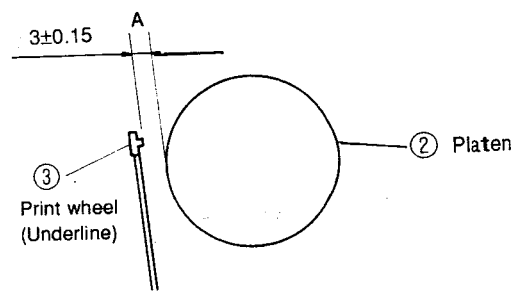
6-3. Platen/print wheel spoke clearance adjustment

1. With the wheel lever locked. move lever latch (1) in direction of arrow A or B so that the clearance between the platen and the print wheel spoke is 3 ± 0.15mm. (Reference value: ± 0.15mm)
2. When the clearance is smaller than the reference value:
Move lever latch (1) in direction of arrow V to adjust to the reference value.

Note: • When checking the clearance, use the underline character spoke of the print wheel.
• Be always careful that the underline character spoke of the print wheel is not deflected.



[Fig. 6-7]



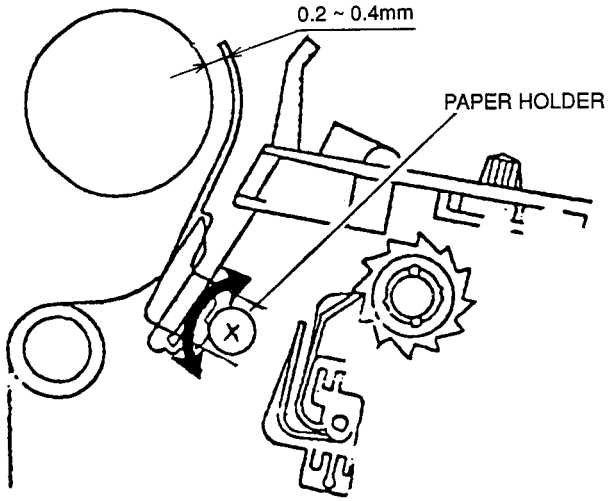
[Fig. 6-8]

6-4. Platen/paper holder clearance adjustment

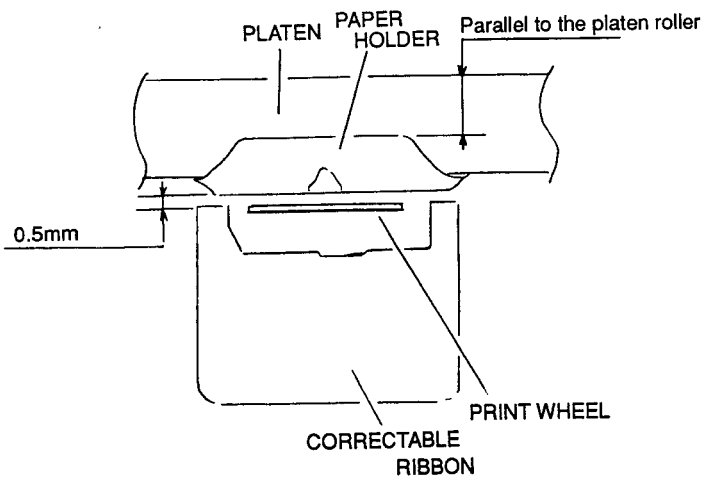
Check that the clearance between the platen roller and the paper holder is 0.2 - 0.4mm. If not, loosen two screws (B1) and adjust to the reference value.

(Check items)

1. Move the paper release lever to release the paper. Manually insert a bond paper and check that the bond paper moves smoothly back and forward.
2. Check that the paper holder is in parallel to the platen roller.
3. Check that the clearance between the paper holder and the ribbon holder is min. 0.5mm.



[Fig. 6-9]



[Fig. 6-10]

6-5. Hammer height adjustment

(1) Make copy samples of repeated capital "H" using pressure-set copy paper, carbon copy paper, and non-carbon copy paper.

(2) If printed image is weak at one side (Fig. 6-11), loosen the screw as shown in Fig. 6-12 and adjust the hammer plate position to obtain the character typed even between top and bottom.

Fine adjustment

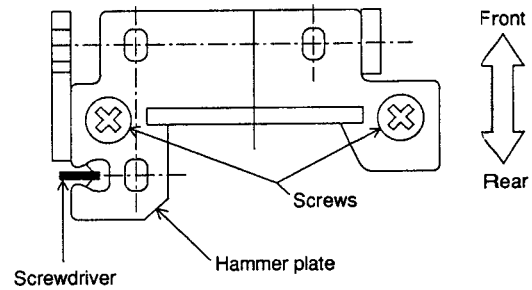
(1) Loose the screw half a turn.

(2) Apply the screwdriver to the slit in the hammer plate and turn it towards the arrowhead (A) or (B), in reference to Fig. 6-13.

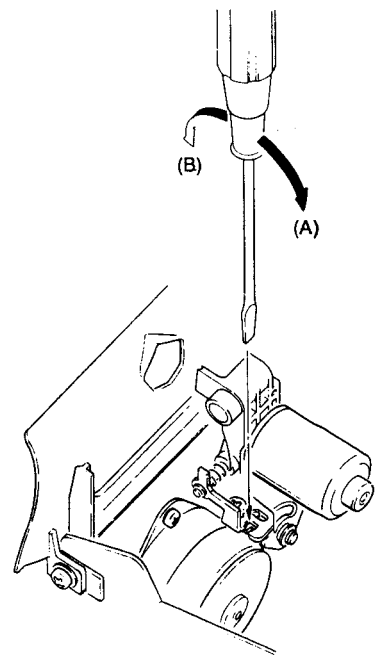
(3) After adjustment has completed, tighten the screw.

H	Missing upper part	Rotate the screwdriver in the arrow direction (A) in Fig. 6-13.
H	Even upper and lower part	At normal location (no adjustment required)
H	Missing lower part	Rotate the screwdriver in the arrow direction (B) in Fig. 6-13.

[Fig. 6-11]



[Fig. 6-12]

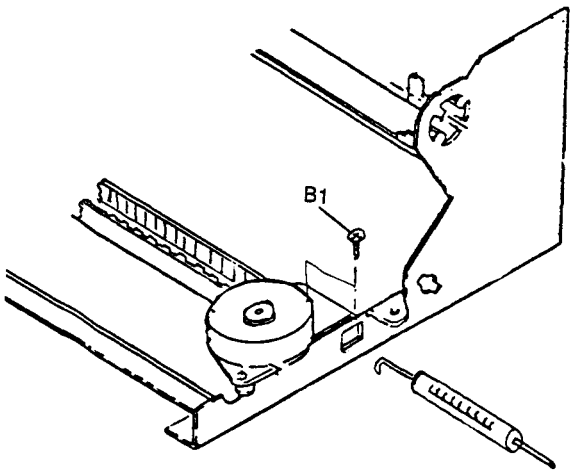


[Fig. 6-13]

* The screw tightening torque must be 9kg•cm.

6-6. Belt tension adjustment

1. Pass the tension gauge (UKOGM5001BCZZ) through the square hole in the main frame R. Pull the CR motor frame tab with a tension of 700g (±100g), and tighten the screws.



[Fig. 6-14]

[7] ELECTRICAL SET UP

The program in the CPU and the gate array can be set to the default of each destination by shorting or non-shorting jumper switch DSW1 1-pin through 4-pin and jumper contact (J3 ~ J5) on the rear surface of the Main board.
The setup procedures are shown below: (For the default of each destination, refer to "DESTINATION TABLE" in the Parts Guide.)

7-1. Default select jumper contact (J3, J4, J5)

The default select switch is provided to select the default on turning on the power. The assigned ports and the default contents are as follows:

(Table 1. Default contents and assigned ports)

Default	Port	Signal name	Setting (Open/Short)
Default print pitch	Port 4, bit 0	J3	10 pitch/12 pitch
Decimal tab division code	Port 4, bit 1	J4	Period/comma
Default print pressure	Port 4, bit 2	J5	Weak/Strong

7-2. Destination switch

By reading data from address 3FF8, the destination data can be read. The data format is as follows. When the switch is on, the content is "0."

Table 2. Read data format

D7	D6	D5	D4	D3	D2	D1	D0
0	0	0	0	SW4	SW3	SW2	SW1

Note: D0 ~ D7 correspond to read data bit 0 ~ 7.

7-3. LCD contrast fine adjustment

(* This adjustment is required whenever the LCD PWB was replaced.)

- **What is needed: Screwdriver**

(Steps)

1. Open the LCD cabinet according to the disassembly and re-assembly procedures.
2. Connect the LCD cable with the main PWB, then turn power on.
3. Rotate the brightness control knob fully down.
4. Rotate the contrast control knob up, then set it to the center position.
5. Insert the screwdriver in the contrast adjusting pot (Fig.1) found on the back of the LCD cabinet and rotate the potentiometer VR2 to obtain the optimum contrast. (Fig.2) $Set it to the middle point between the upper and lower limits of the contrast.

Fig.1: LCD PWB reverse side

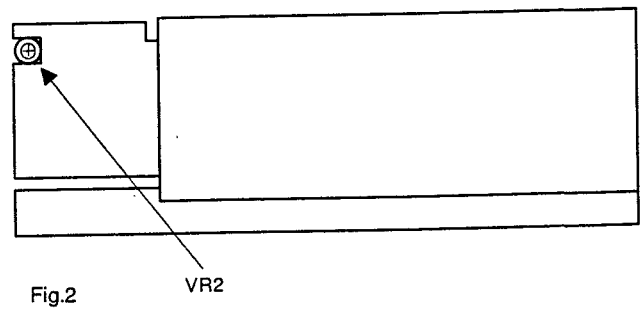
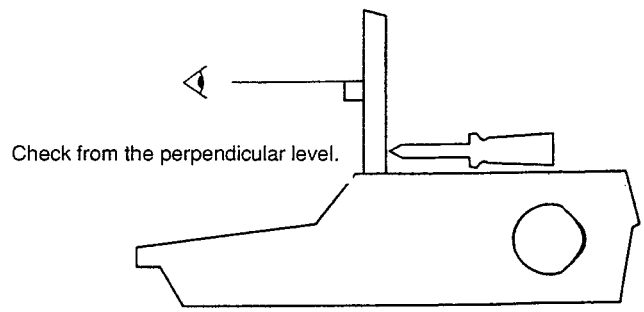


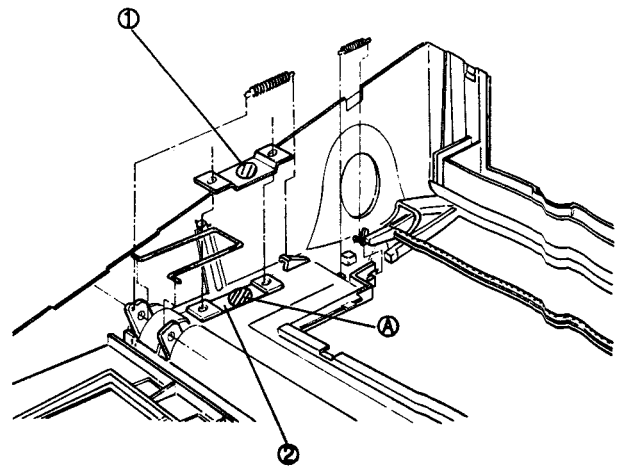
Fig.2



⚠ NOTE: Never touch the inverter PWB when adjusting the contrast because the PWB has a high voltage added.

[8] LUBRICATIONS

1. Apply a small quantity (about 2g) of screw grease (UKOG-0185CSZZ) to the blocked area (A) of spring plate (2) in the rear of the upper cabinet.



[9] BASIC FUNCTIONAL CHECKS

9-1. Power-on check

Check the following after pressing the main switch with the power key.

1) Make sure that the ribbon stops at its home position after shifting up and down (ribbon initial action).
2) Make sure that the printwheel stops at its home position (underline).
3) Make sure that the carriage base stops on its left margin (at 10th column in the ten pitch mode which is initial setting).

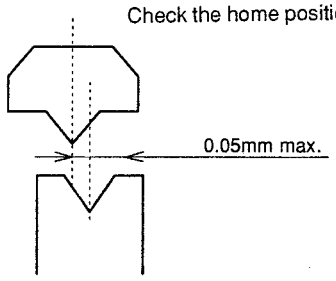
   NOTE: For some of machines are set to the 12 pitch mode, refer to Destination Table in Parts Guide.

4) Make sure that the main menu is displayed in the LCD.

9-2. Manual check during initial state

1) Move the LCD contrast adjust VR and check to see that the LCD contrast changes.
2) Move the LCD brightness adjust VR and check to see that the backlight is adjusted.
3) Press the ET/WP key and check to see that it goes into the typewriter mode.
   Operation must be carried out in the typewriter mode, hereinafter.

9-3. Checking printwheel home position



[Check]

The printwheel and the hammer must be positioned as shown in the figure above, when the printwheel stops at its home position. If deviated from the limits, rotate the wheel motor to make fine adjustment of the home position. (This check-out needs to be done while power is on. After the fine adjustment has completed, turn power off and on to check its initial operation.)

9-4. Checking key entry

In the initial state, type every key to check that the character printed conforms to the keytop inscription.

9-5. Checking paper holding plate position

Make sure that there is a clearance of 0.2 to 0.4mm between the paper holding plate and the platen and insert the test paper to check that it moves smooth. The clearance must be adjusted using the feeler gauge.

9-6. Checking carriage movement

Press the [MAR REL] [BS MICRO] keys until beep is heard and keep the [L-MAR R-MAR] [SPACE] keys pressed. (Must be in the AUTO-CR mode.)

[Check]

Make sure that the carriage moves smooth without stopping on its way, showing no speed fluctuation, irregular noise, and vibration.

9-7. Checking paper insertion

[Operation]

Rotate the platen knob to insert the paper.

Press the [↑ PRE SCRN] or [↓ NEXT SCRN] key to move the paper up and down.

[Check]

The paper must move smooth without noise and skew.

9-8. Checking ribbon and tape lift rate

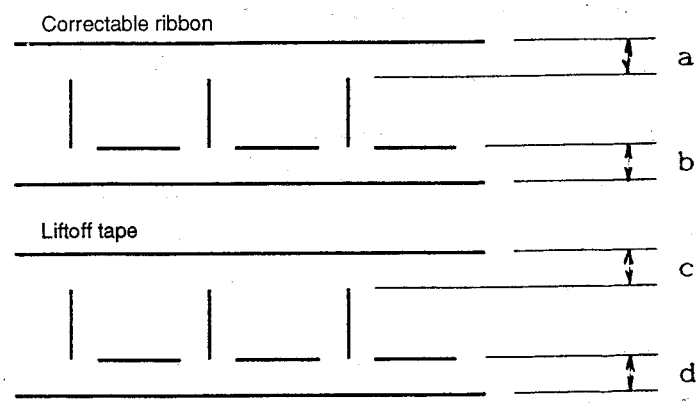
[Operation]

1) Type [CODE] + [U XXX], [KBII], [? / |] keys to print ten characters.
2) Press the [⌧] key to erase five characters.

[Printout]

[Check]

Check the trace on the correctable ribbon and the liftoff tape to see that they are as shown below.



[Check]

a ≧ 0.5, b ≧ 0.5, c ≧ o.5, d ≧ 0.5

After printing, press the [MODE] + [U XXX] keys to cancel the underline mode.

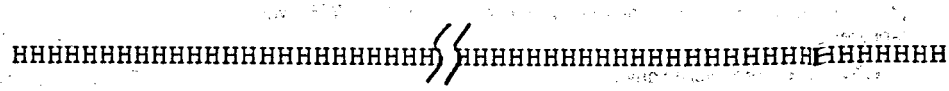
Press the [KBII] key to cancel the KBII MODE.

9-9. Checking print pitch

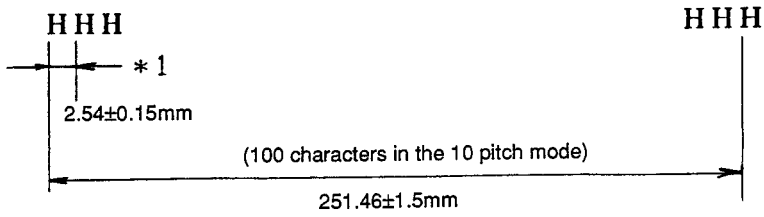
[Operation]

Press the [LOCK] and [H] keys.

[Printout]



[Check]



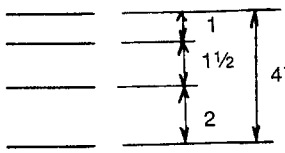
* Distance in the 10 pitch mode: 2.54±0.15mm
12 pitch mode: 2.12±0.15mm
15 pitch mode: 1.69±0.15mm

9-10. Checking linefeed pitch

[Operation]

1) Press [LOCK] , [- - ¨ / - ç] keys to print about five characters, then press the [CR] key.
2) Press [CODE] , [! / 1] , [- - ¨ / - ç] keys to print about five characters, then press the [CR] key.
3) Press [CODE] , [! / 1] , [- - ¨ / - ç] keys to print about five characters, then press the [CR] key.
4) Press [CODE] , [! / 1] , [- - ¨ / - ç] keys to print about five characters, then press the [CR] key.

[Printout]



1 = 4.23 ± 0.15mm
1½ = 6.35 ± 0.15mm
2 = 8.47 ± 0.15mm
4½ = 19.05 ± 0.15mm

[Check]

The linefeed pitch must within the given allowances.

9-11. Checking the machine action and printout in the diagnostic mode (with underscore)

[Operation]

[CODE] + [SHIFT] + [ET/WP] , [F6] , [F2]

[Printout]

See the print sample in the right side.

Press the [F2] key to print about three lines.

(Press the [CANCEL] , [CANCEL] , [ET/WP] key to return to the typewriter mode.)

[Check]

1) Check the above printout to see that it is free from a lack of impression, partial missing, blur, and glitch.
2) Check to see that the underscores are continuing without breaking.
3) Check to see that the hammer, ribbon, printwheel, paper, and carriage can move smooth without irregular noise generated.

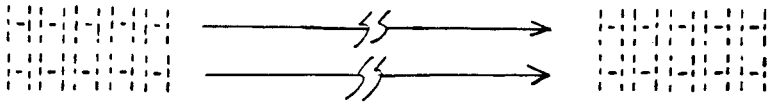
:;`´^£!"#$%&'()*+,-./0123456789:;°=?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[½] abcdefghijklmnopqrstuvwxyzç 3 1/4
:;`´^£!"#$%&'()*+,-./0123456789:;°=?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[½] abcdefghijklmnopqrstuvwxyzç 3 1/4
:;`´^£!"#$%&'()*+,-./0123456789:;°=?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[½] abcdefghijklmnopqrstuvwxyzç 1/2

9-12. Checking correction quality (including linefeed correction)

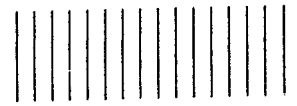
[Operation]

1) Type [LOCK] , [H] keys to print ten characters.
2) Press the [TAB] key four times.
3) Type the [H] key to print ten characters.
4) Press the [RETURN] key.
5) Repeat above steps 1) thru 3) once again.
6) Press the [⌧] key to erase all characters typed.

[Printout]



[Printout]



[Check]

1) Each draw line should not have a deviation of more than 0.07mm.

9-13. Checking correction quality (in the boldface mode)

[Operation]

Type [CODE] + [B Bold] , [LOCK] , [W] key for ten times.

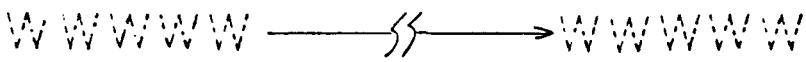
Press the [⌧] key to erase five characters.

Press the [TAB] key five times.

Type the [W] key to print ten characters.

Press the [⌧] key to erase five characters.

[Printout]



9-14. Checking ghost

[Operation]

Type [CODE] + [B Bold] , [KBII]

[LOCK] [-- ¨ - ç] [SPACE] [RETURN CLR IND] keys to print ten characters.

TYPE [+ =] [SPACE] keys to print ten characters.

[Printout]

[Check]

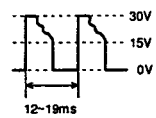
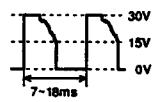
Check to see that there is ghost (smear) in umlaut and accents.

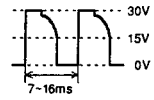
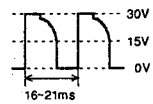
9-15. Checking line draw quality

[Operation] (Use the line space of "1".)

1) Press [KBII] , [? / |] , [RETURN CLR IND] keys.
2) Repeat the above step 1) three times.

[10] TROUBLESHOOTING GUIDE

Problem	Item	Check	Correction
1. When the AC switch and power switch are turned on, the carriage, ribbon wheel, and paper feed mechanism will not operate properly.	1. Power voltage	1. Check that the power unit output voltage is within the range of rated voltage ±10%.	If not, replace the power unit.
	2.	1. Check for short in the power line.	If short is found, repair or replace the board.
		2. Check the output voltage of the power circuit. (+5V ±0.25V, +15.7 ±0.5V)	If the voltage is outside the specified range, repair or replace the board.
		3. Fuse	If blown off, replace.
		4. Check the $\overline{\text{RESET}}$ voltage (+5V ±0.25V).	If outside the specified range, repair or replace the main board.
	3. Connector	1. Check the connections of the power connector, carriage, flat cable connector, carriage origin signal connector, other motor connectors, and carriage board connectors.	If improperly connected, connect properly.
	4. Carriage flat cable	1. Check cable conduction.	If not conducted, replace the cable.
	5. Ribbon motor	1. Check motor resistors. (Check pin No. and standard resistance) 1 ↔ 2 0 Ω 1 ↔ 3 60 Ω ± 7% 1 ↔ 4 60 Ω ± 7% 2 ↔ 5 60 Ω ± 7% 2 ↔ 6 60 Ω ± 7%	If any resistance is outside the specified range, replace the motor.
	6. Ribbon motor drive circuit	1. Observe the initial operation pulse voltage of IC4 (11, 12, 13, 14 pins). (Standard pulse voltage) 	• If the standard pulse voltage is not observed, repair or replace the main board.
	7. Carriage motor	1. Check resistors of motor. (Check pin No. and standard resistance) 1 ↔ 2 0 Ω 1 ↔ 3 40 Ω ± 7% 1 ↔ 4 40 Ω ± 7% 2 ↔ 5 40 Ω ± 7% 2 ↔ 6 40 Ω ± 7%	If any resistance is outside the specified range, replace the motor.
	8. Carriage motor drive circuit	1. Observe the initial operation pulse voltage of IC6 (2, 7, 10, 15 pins). (standard pulse voltage) 	• If the standard pulse voltage is not observed, repair or replace the main board.
	9. Wheel motor	1. Check resistors of motor. (Check pin No. and standard resistance) 1 ↔ 2 0 Ω 1 ↔ 3 60 Ω ± 7% 1 ↔ 4 60 Ω ± 7% 2 ↔ 5 60 Ω ± 7% 2 ↔ 6 60 Ω ± 7%	If any resistance is outside the specified range, replace the motor.

Problem	Item	Check	Correction
	10. Wheel motor drive circuit	Observe the initial operation pulse voltage of IC5 (13, 14, 15, 16 pins). (Standard pulse voltage)  	• If the standard pulse voltage is not observed, repair or replace the main board.
	11. Paper feed motor	1. Check resistors of motor. (Check pin No. and standard resistance) 1 ↔ 2 0 Ω 1 ↔ 3 40 Ω ± 7% 1 ↔ 4 40 Ω ± 7% 2 ↔ 5 40 Ω ± 7% 2 ↔ 6 40 Ω ± 7%	If any resistance is outside the specified range, replace the motor.
	12. paper feed motor drive circuit	1. Observe the initial operation pulse voltage of IC4 (10 pin) and IC5 (10, 11, 12 pins) (Standard pulse voltage)  	• If the standard pulse voltage is not observed, repair or replace the main boars.
	13. Carriage origin (CRZ)	1. check that the carriage base pin (which presses the sensor unit switch when the carriage is shifted to the left end) is not cracked.	If damaged, replace the pin.
		2. Shift the pin and observe the CRZ signal voltage. (Standard voltage) (1) When the carriage is at the right end: 5V ±0.25V (2) When the carriage is at the left end: 0.8V or less	If the standard voltage is not observed, replace the sensor unit.
	14. Carriage load	1. Check for existence of any alien object between the drive gear and the belt. 2. Check for existence of of any alien object between the drive gear and the CR motor pinion. 3. Check the card holder if not in close contact with the platen.	• Clean away alien object. • If so, make it adjusted to have the regular gap.
2. Correct keyboard entry is not permitted or no entry is allowed.	1. Keyboard connector	1. Check the connector if not loose.	• If not connected or connected loose, make it fastened firmly.
	2. Keyboard	1. Check if the given signals appear when a key is pushed.	• If not, replace the keyboard.
	3. In neither case	1. Main PWB	• Correct or replace the main PWB.
3. Irregular printout, no printout, print error, print failure, etc.	1. Supply voltage	Refer to 1-1-1	
	2. Supply voltage output	Refer to 1-2-1 ~ 4	
		5. While the hammer impact motor is in action, check power supply voltage fluctuation.	• Check the resistance of the solenoid and motor. Replace it if not within the limits. Solenoid resistance: approx. 3.8Ω.
	3. Connector	Refer to 1-3-1	
	4. Ribbon	1. Check the ribbon if mounted. Also, check the ribbon if not used up.	• If not mounted or used up, load a new ribbon.
	5. Ribbon feed	1. Check the ribbon if mounted on its given location.	• If not, correct the ribbon location.
		2. Check for disconnection or open line in the motor connector and carriage flat cable connector.	• If the connector was not connected, make the connector connected. If open, replace it.

Problem	Item	Check	Correction
		3. Check continuity of the ribbon motor. Refer to 1-5-1.	
		4. Check the driver circuit. Refer to 1-6-1.	
		5. Check engagement of the RF drive with the RF drive gear.	• If the engagement is not proper, replace it with a new one.
	6. Printwheel	1. Check the printwheel if set on the correct location.	• If not, make it mounted on the correct location.
		2. Check the printwheel if not bend or broken.	• If so, replace it with a new one.
	7. Error print	1. Check the printwheel if it is on its given location immediately after the power is turned on. The underline should be in front of the hammer.	• Replace the zero cross lever with a new one.
		2. Check the printwheel if it returns to its position after completion of printing.	• Refer to 1-8-1. • Refer to 1-9-1. Note that the pulse voltage duration is 4 ~ 9ms.
		3. Check deviation between the underline spoke V locator and the hammer V slit.	• If a deviation is seen, adjust the home position of the printwheel. (See the paragraph discussing the wheel motor location adjustment.)
	8. Hammer • Does not operate. • Print not produced even if operated.	1. Connector connection Refer to 1-3-1.	
		2. Check for an open line in the carriage flat cable.	• Replace it with a new one, if a line is open.
		3. Check continuity of the hammer solenoid. Should be approx. 3.8Ω if normal.	• Replace the solenoid with a new one if the line is open or the resistance is not normal.
		4. Push the hammer out and see if it operates smoothly.	• Replace the solenoid with a new one. • Correct or replace the hammer unit.
	9. Hammer impression	1. Have "H" printed continuously on a paper or using a carbon paper and check impression.	• If impression is not even, adjust the hammer gap.
	10. Carriage travel	1. Connector connection Refer to 1-3-1.	
		2. Check motor continuity. Refer to 1-7-1.	
		3. Motor drive circuit. Refer to 1-8-1.	
		4. Check the belt tension is appropriate.	• Adjust it to the best setting, in reference to the belt tension adjustment procedure.
4. Correction failure	1. Correction tape	1. Check the correction tape if properly installed or not used up.	• Make it correctly installed. • Replace it with a new one.
	2. Correction tape lift	1. Check the R-ADJUST PIN if properly seating in the slit of the cam.	• If not, make it corrected.
		2. Check the tension of the correction tape if correct.	• If the tension was not added, check or replace the back tension spring of the right tape holder.
		3. Check the shift rate of the correction tape if correct.	• If not, adjust the rate of shift, in reference to paragraph discussing ribbon/correction tape shift rate adjustment.
	3. Correction tape feed	1. Shift the correction tape to see if the tape advances.	• If not, adjust the shift rate, in reference to (the paragraph discussing the ribbon/correction tape shift rate adjustment.
	4. Correction deviation	1. Check for inclusion of alien object between the drive gear and the belt.	• If there is, clean it away.
		2. Check the hammer if it has a play.	• If too much play was seen, replace the hammer.
		3. With the CR motor not installed, check the slide action of the carriage.	• If the slide movement is heavy, remove the slide shaft and clean the carriage bushing and the shaft.

Problem	Item	Check	Correction
		4. Check the belt tension if proper.	Adjust it to the best tension, in reference to the paragraph discussing the belt tension.
5. Platen does not rotate	1. Platen	1. Check the platen if it is properly set on its given location.	If there is an axial play, remove the play and re-tighten the screw.
	2. Paper feed motor	1. Check the paper feed motor connector. Refer to 1-3-1.	
		2. Check continuity of the motor. Refer to 1-11-1.	
		3. Motor drive circuit. Refer to 1-12-1.	
	3. Idle gear	Check the PF idle gear if rotates smooth or check for a damage in the gear.	Replace the gear, if fails to rotate or rotation is heavy, or a damage was discovered.
	4. PF idle spring	1. Check the PF idle spring if not disengaged.	• Have the spring corrected to engage.
		2. Check the PF idle spring if not damaged.	• Replace it if damage was seen.
	5. Platen	1. Check the platen setscrew if not loose.	• Tighten the setscrew firm.
		2. Check for a damage in components.	• Replace it if damage was seen.
	6. Platen rotation	1. Replace platen parts if smooth rotation was not seen.	• Manually rotate the platen to check if it rotates smooth.
	7. If all above are correct.	1. Main PWB	• Replace the main PWB.
6. Paper not fed	1. Release lever	1. Check the release lever if it is on the release position.	• If not, set it on the release position.
	2. Feed roller	1. Check the feed roller if rotates together with the platen.	• If not rotating, replace the feed roller and the roller holder.
7. LCD does not display text normally.	1. Contrast volume	1. Turn the volume to change the contrast and check that the contrast can be properly adjusted.	• If not adjusted, proceed the next step.
	2. LCD cable	1. Check conduction of the cable.	• If not conducted, replace the cable.
	3. Power voltage	1. Check that the LCD negative power voltage and the LCD logic power voltage are within the specified range. (–24V±1.5V, +5V ±0.25V)	• If outside the range, repair or replace the main board.
	4. LCD control signal	1. Check that the specified pulse voltage is outputted at S, CP1, CP2, LD0 ~ 3.	• If not, repair or replace the main board.
	5. No trouble is found in the above checks.		• Replace the LCD unit.
8. Floppy disk read/write error occurs.	1. Floppy disk media	1. Write protection notch is set at write protection position.	• Slide the write protection notch to the write enable position, and proceed the next check.
		2. Check that the same error occurs in a new media or not.	• If the same error occurs, proceed the next check.
	2. Floppy disk cable	1. Conduction check	• If not conducted, replace the cable.
	3. Power voltage	1. Check that the floppy disk drive power voltage is within the specified range. (+5V ± 0.25V)	• If outside the range, repair or replace the main board.
	4. Floppy disk control signal	1. Check that the output signal from the board is at the specified pulse voltage.	• If the specified pulse voltage is not observed, repair or replace the main board.
		2. Check that the input signal to the board is at the specified pulse voltage.	• If the specified pulse voltage is not observed, replace the floppy disk drive.
9. The LCD backlight will not light up.	1. Backlight cable	1. Check conduction of the cable. (Check in the slide volume side, too.)	• If not conducted, replace the cable.
	2. Power voltage	1. Check that the backlight input voltage is within the specified range. (15V ± 0.5V)	• If outside the range, repair or replace the main board.
	3. No trouble is found in the above checks.		• Replace the invertor and the cool CRT.

[11] DIAGNOSTICS

The diagnostic program in the 4meg-bit mask ROM will allow to test the following items:

1. MEMORY TEST
2. FD COMPATIBILITY TEST
3. FDD TEST
4. DESTINATION TEST
5. AGING TEST
6. MECHA TEST
7. LCD TEST
8. FDD WRITE PROTECT TEST
9. KEYBOARD TEST
10. FINAL TEST

(Operation)

11-1. Power on

Turn on the main power switch found on the left side of the machine and press power key. Then, the following menu (initial menu) is displayed.

..... <<MAIN MENU>> .....

F1 : Create a document file (DOC)
F2 : Retrieve a document file (R DOC)
F3 : Create a merge file (MERGE)
F4 : Retrieve a merge file (R MERGE)
F5 : Create a form fill-in (FORM)
F6 : Retrieve a form fill-in (R MERGE)
F7 : User's dictionary (DICT)

11-2. Selecting diag menu

Press [CODE + SHIFT] + [ET/WP] keys to select the diag menu.

..... <<DIAG MENU>> .....

F1 : MEMORY TEST
F2 : SOS ROM TEST
F3 : FDD TEST
F4 : DESTINATION TEST
F5 : AGING TEST
F6 : MECHA TEST
F7 : LCD TEST
F8 : FDD WRITE PROTECT TEST
F9 : KEY BOARD TEST
F10 : FINAL TEST
CANCEL : EXIT

ENTER YOUR SELECTED KEY

Press one of F-1 ~ F10 key to choose the test item.

11-3. Diag menu contents

* Press the CANCEL key to return to the previous menu from the diag menu.

KEY No.	Test item	Function	Check method	Result (in the auto check mode)		Note
				OK	NG	
F1	MEMORY TEST	DRAM and PSROM read/write test.	Auto test (The test results are displayed.)	The following is displayed. "RAM CHECK OK"	The following is displayed. • For a DRAM error "DRAM ERROR" • For a PSRAM error "PSRAM ERROR"	
F2	Floppy disk compatibility test (This item is not required since the read/write test is conducted in the floppy disk test item.	Check that the MS-DOS formatted reference disk is properly read. (Though the reference disk is required, this test item is not required to do.)	〃	——	——	——
F3	FDD TEST	Floppy disk drive functional tests (Read/write test, seek test)	Auto test (The test results are displayed.)	The following is displayed. "COMPLETED!!"	The following is displayed "READ/WRITE ERROR!" , "NO DISK!" "COMPARE ERROR!" , "WRITE PROTECT ERROR!" "FDC ERROR" , "SEEK ERROR! (READ)" , "SEEK ERROR!" , "TIMEOUT ERROR!" , "TC ERROR"	• NOTE-2
F4	DESTINATION TEST	Main control board destination setup test (Displays the state of contact point settings)	Visual check of the display message	The following is displayed and printed. "DES. CHECK---ALL OPEN", or, "DES. CHECK XX", where "XX" represents the location.	——	• See Description-1.
F5	Aging test (This item is not required as it is used only in the factory line.)	——	——	——	——	——
F6	MECHA TEST	Mechanical print quality test	Visual check of the printout	——	——	• NOTE-1 • See Description-2.
F7	LCD TEST	LCD functional test (Test pattern displayed) Press the space bar to display the following six kinds of patterns. (1. All characters 2. All dots 3. All dots not in display 4. Diagonal pattern 5. Mesh 6. Reverse mesh) Check for a dot omission and display error.	Visual check of the display contents	——	——	——
F8	FDD WRITE PROTECT TEST	Floppy disk drive write protect test	AUTO CHECK	The following is displayed and printed. "FDD PROTECT OK"	The following is displayed and printed. "FDD PROTECT NG"	• NOTE-1 • NOTE-4

KEY No.	Test item	Function	Check method	Result (in the auto check mode)		Note
				OK	NG	
F9	KEYBOARD TEST	Key entry test • All keys need to be pressed one by one in the specified order.	Auto test (manual key depression)	The following is displayed and printed. "KEYBOARD TEST OK"	• The following is displayed and printed. "KEYBOARD TEST NG"	• NOTE-1 • NOTE-3 • See Description-3.
F10	FINAL TEST	Final functional tests • Diag F1, F3, and total print of diag F6 are executed continuously.	Auto test + visual check of printout	• The following is displayed and printed. "RAM CHECK OK" "FDD CHECK OK"	• The following is displayed and printed. "RAM CHECK NG" "FDD CHECK NG"	• NOTE-1 • NOTE-2

NOTE-1: A sheet of paper needs to be inserted before starting a test, as the results are printed.
NOTE-2: A newly formatted disk needs to be inserted in the floppy disk drive before starting the floppy disk drive test. When this test is conducted, all the contents stored in the floppy disk are destroyed.
NOTE-3: The keys must be pressed one by one.
NOTE-4: It is necessary to set the write protect switch of floppy disk when execute this test.

Description-1

(Destination test: F4)

- The state of the contact point settings open/short) of the main PWB is displayed. See the table next for the code numbers on the display.

CONTACT POINT	J5	J4	J3	SW1	SW2	SW3	SW4
Code	7	6	5	4	3	2	1

* All open for the US version.

See "Destination table" in [7] ELECTRICAL SETUP" in Parts Guide.

Description-2:

(Mechanical test: F6)

- As the following is displayed after the mechanical test mode was displayed, choose one of items according to "[6] Adjustment" or whatever required.

. . . . . .<<MECHA TEST>> . . . . . [Check]

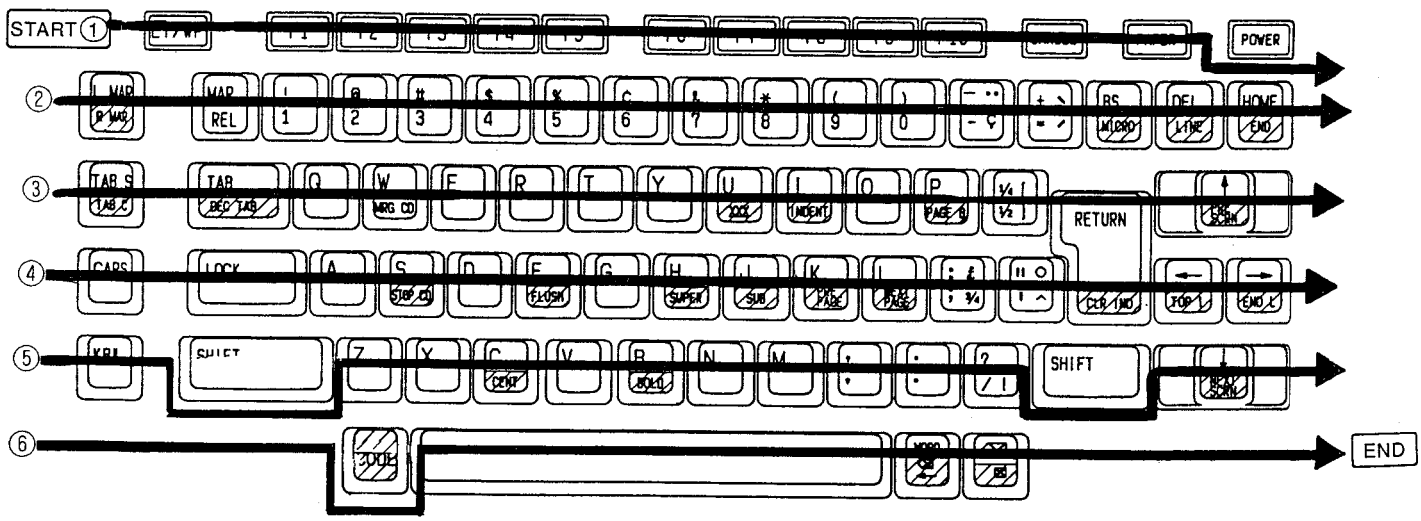
F1 : TOTAL PRINT ⟶ Overall print functional tests
F2 : ALL CHARACTER PRINT ⟶ All characters printout and underscore test
F3 : BI-DIRECTION PRINT ⟶ Bidirectional print test
F4 : H & UNDERLINE PRINT ⟶ Ribbon feed rate test and print pitch test
F5 : VARIOUS PITCH PRINT ⟶ Printout and linefeed pitch tests
F6 : GHOST TEST PRINT ⟶ Ghost print test
F7 : VERTICAL-LINE PRINT ⟶ Line draw quality test
F8 : CORRECTION ⟶ Correction quality test
F9 : BOLD CORRECTION ⟶ Boldface correction quality test
F10 : V-LINE WITH UNDERLINE PRINT ⟶ Ribbon and liftoff tape rate tests
CANCEL : EXIT

Description-3

(Keyboard test: F9)

- Tests all keys except for the power, shift, and code keys.
  To do the test, press a key in order of ① → ② → ③ → ④ → ⑤ → ⑥ from the starting point in the upper left corner of the figure.
  When all 75 keys have been pressed, the menu in Fig.2 appears and "KEYBOARD TEST OK" printed.

NOTE) A error occur when pressed down a key more than 0.5 sec.



[Fig. 1]

.....<<KEYBOARD TEST>> .....

KEY COUNT -- 75
KEY TOTAL -- 75

KEYBOARD TEST OK

[Fig. 2]

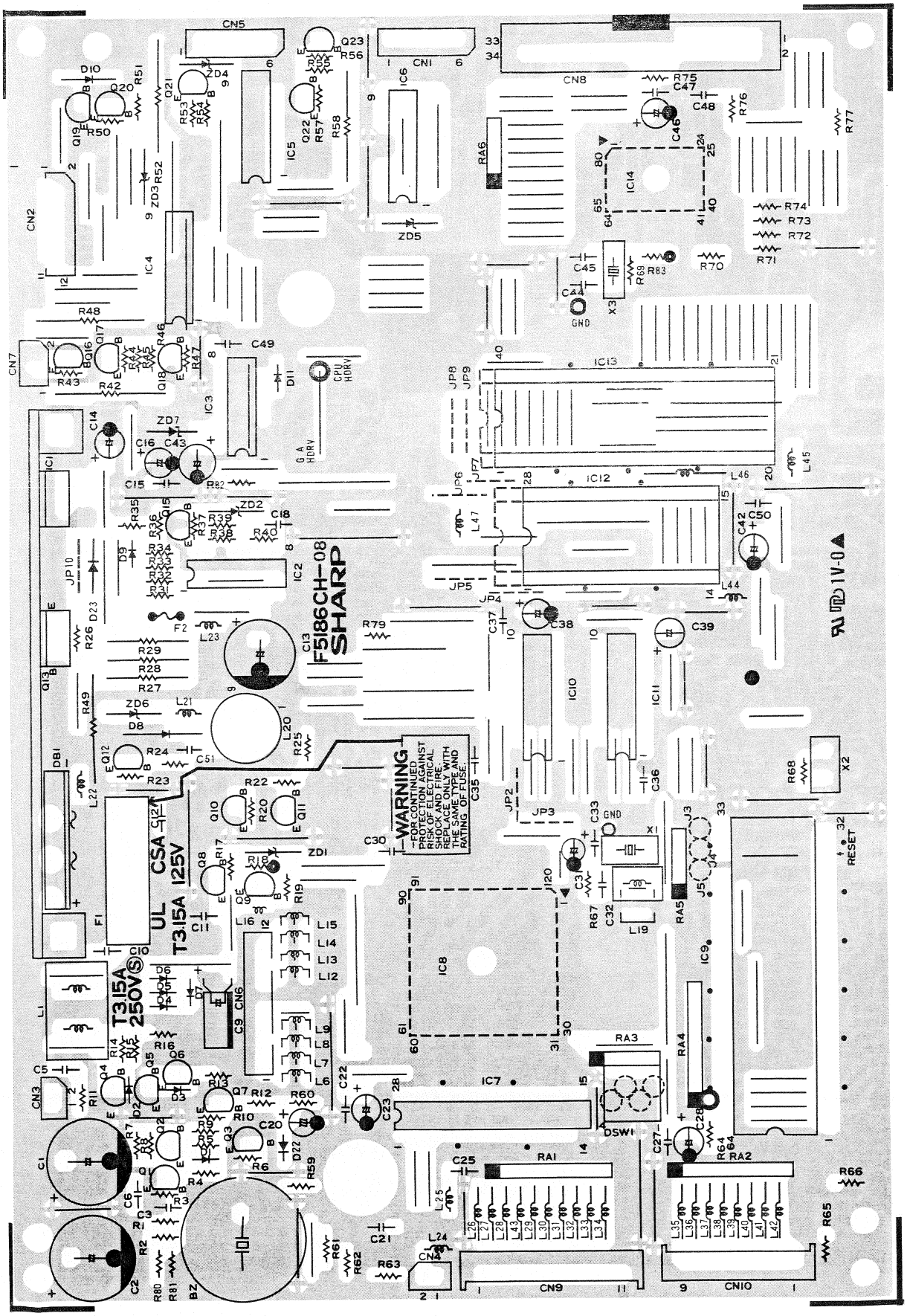
(Operation)

* The power key must be checked by operation "11-1. Power on."
  The shift and code keys must be checked by checking selection of the menu in the diag mode.

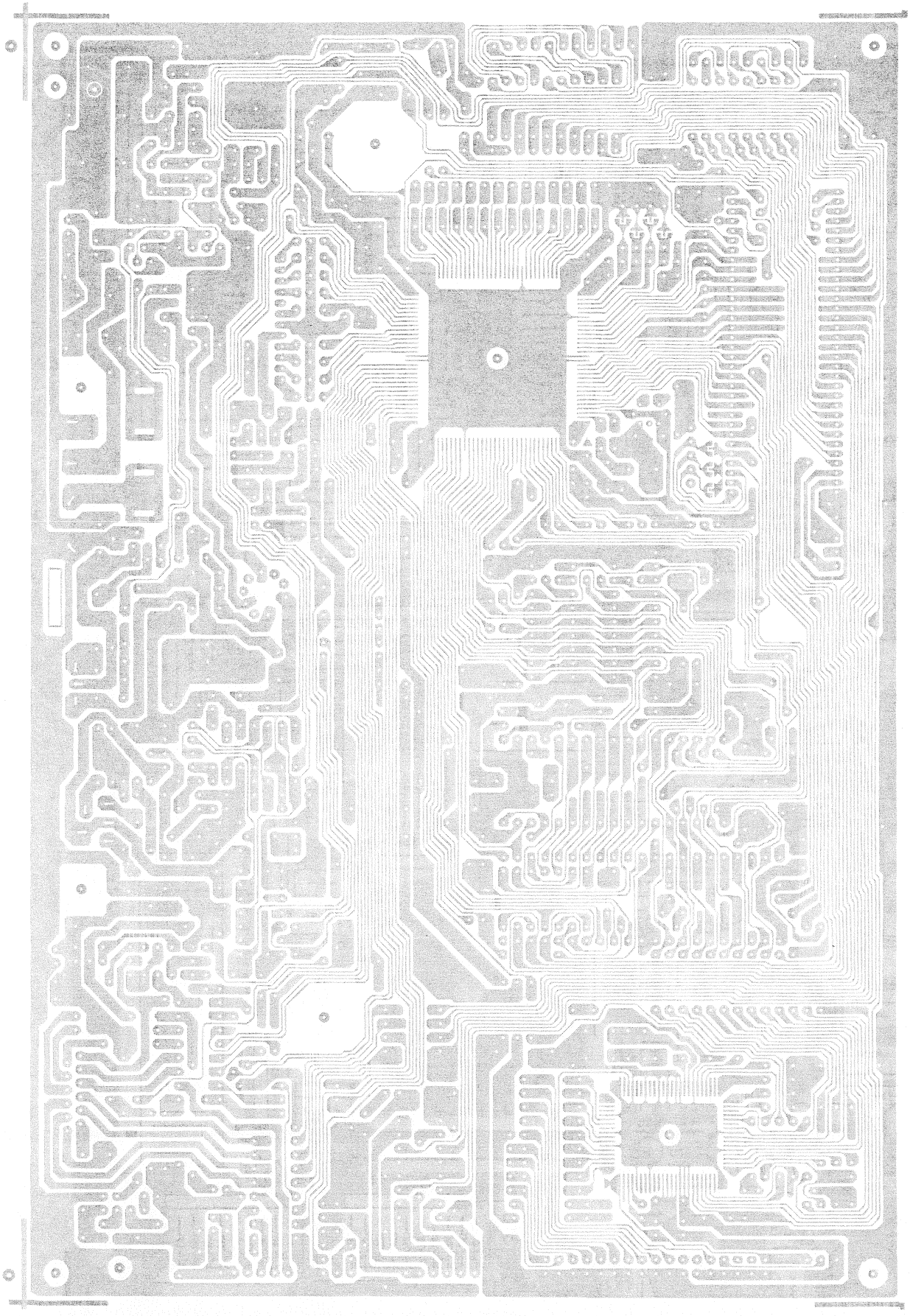
[12] Parts layout and circuit diagram

12-1. Main control board (F5186CH-08 Version)

Top view

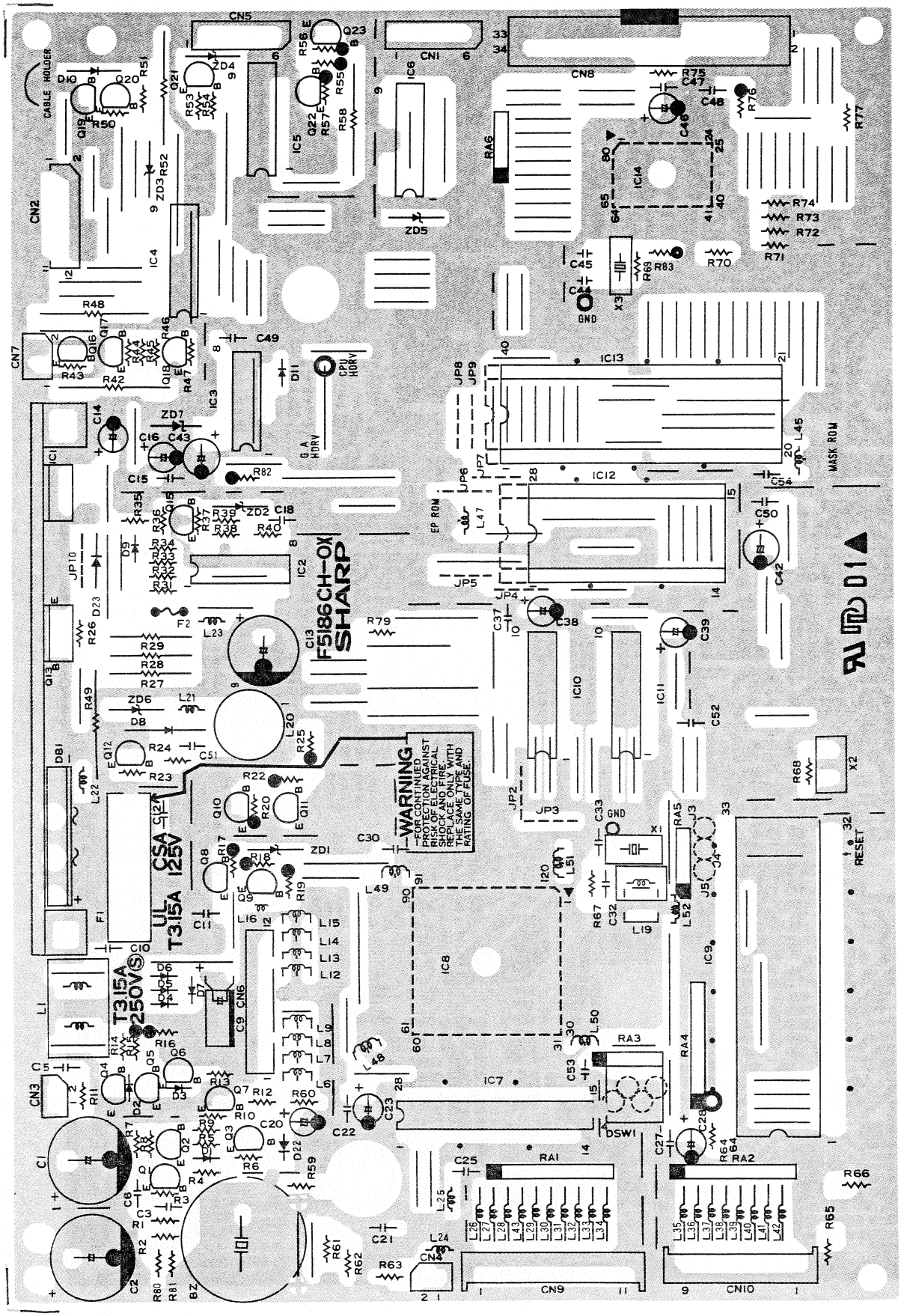


Bottom view (F5186CH-08 Version)

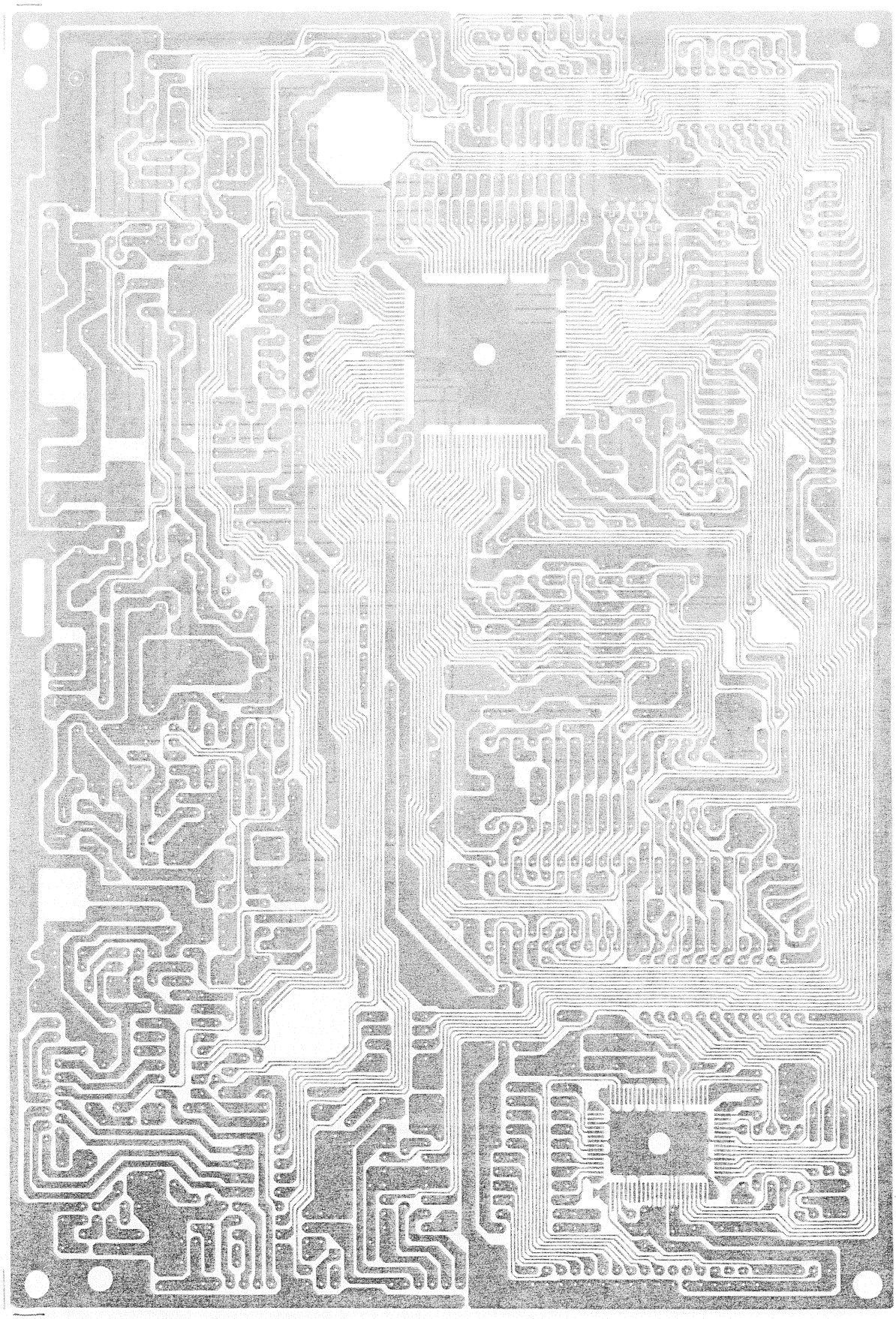


Main control board (F5186CH-0X Version)

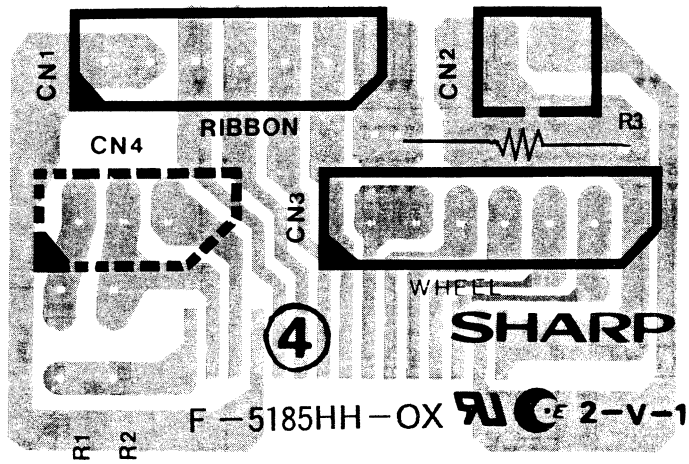
Top view



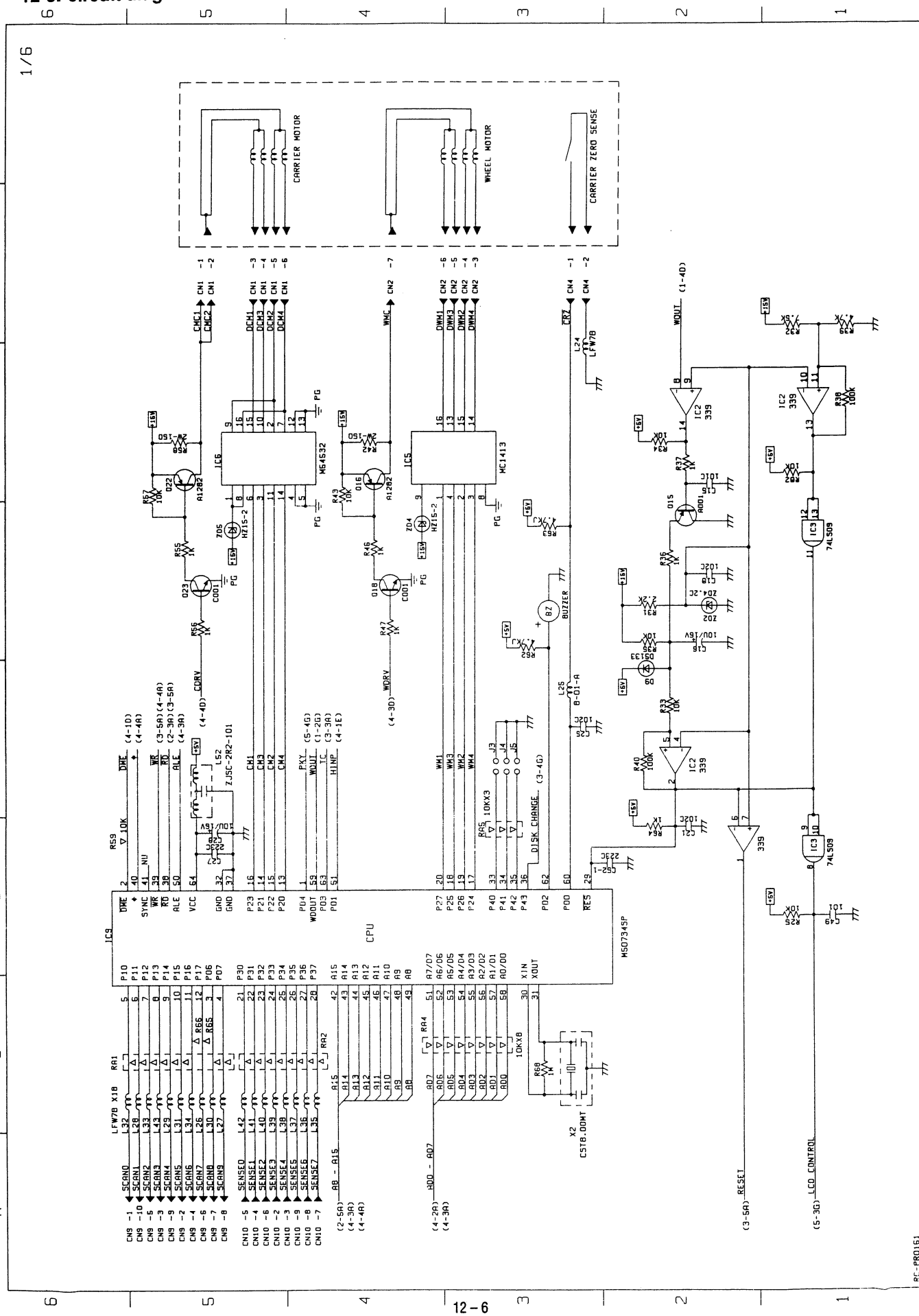
Bottom view (F5186CH-0X Version)

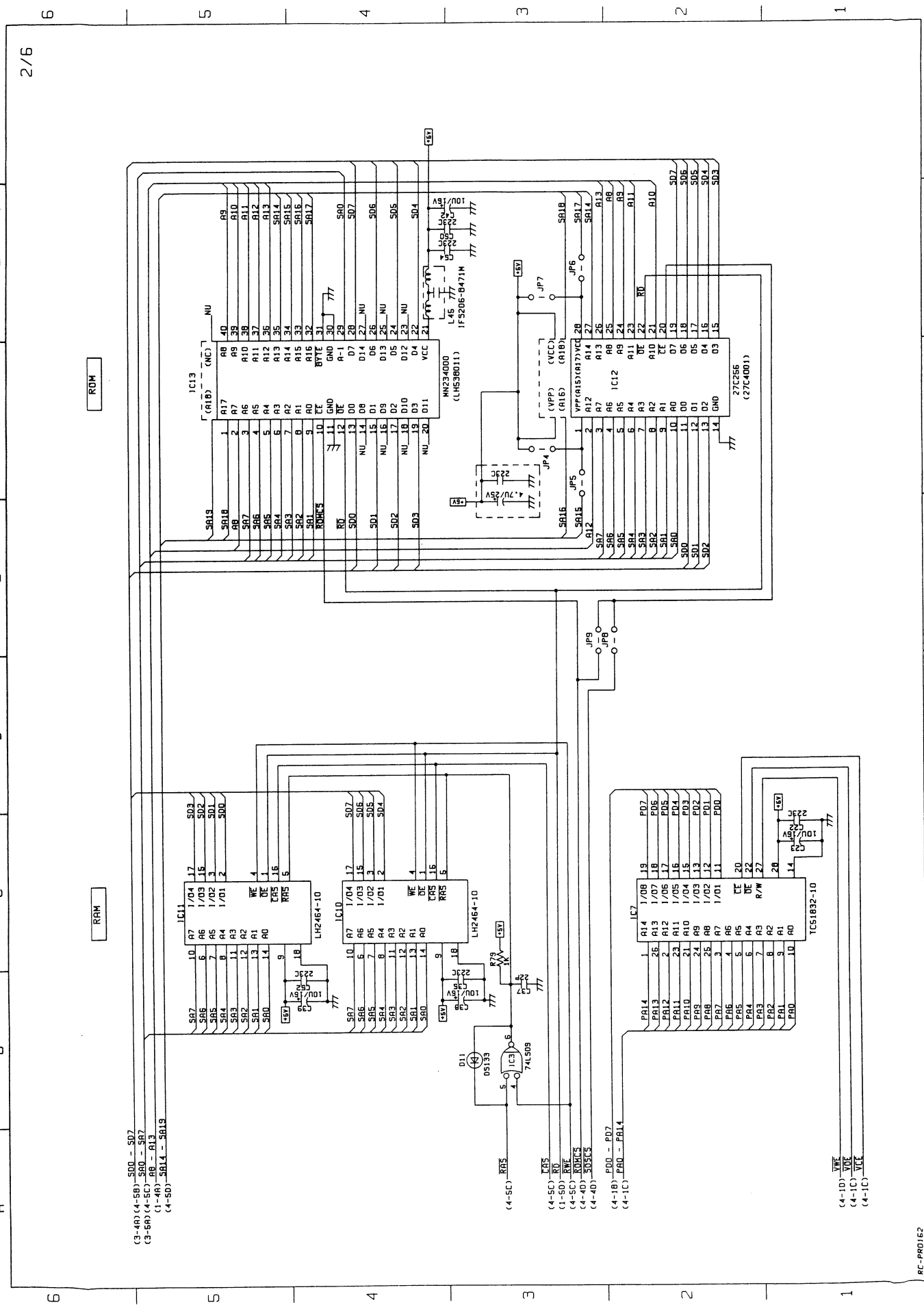


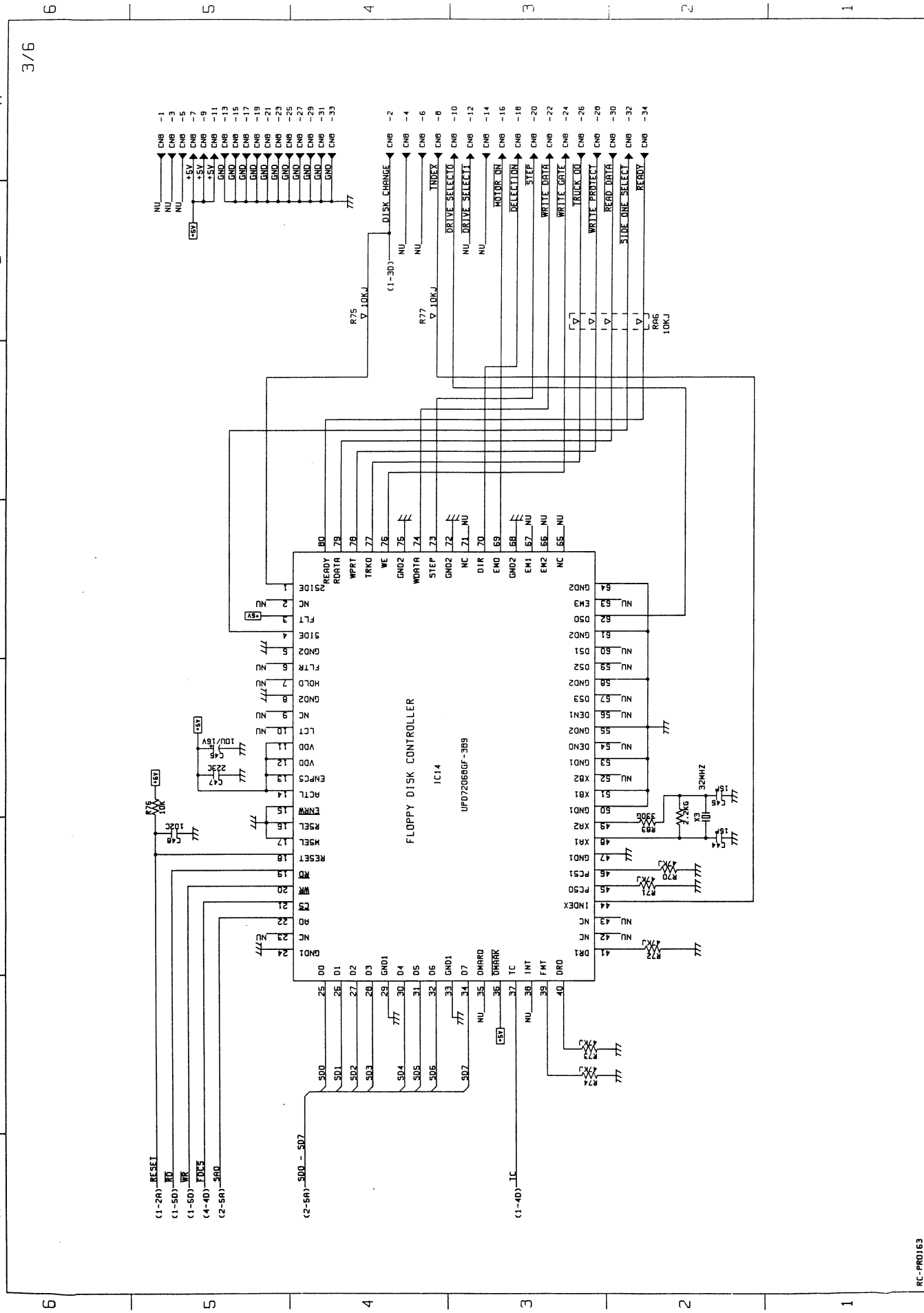
12-2. Carriage P.W.B

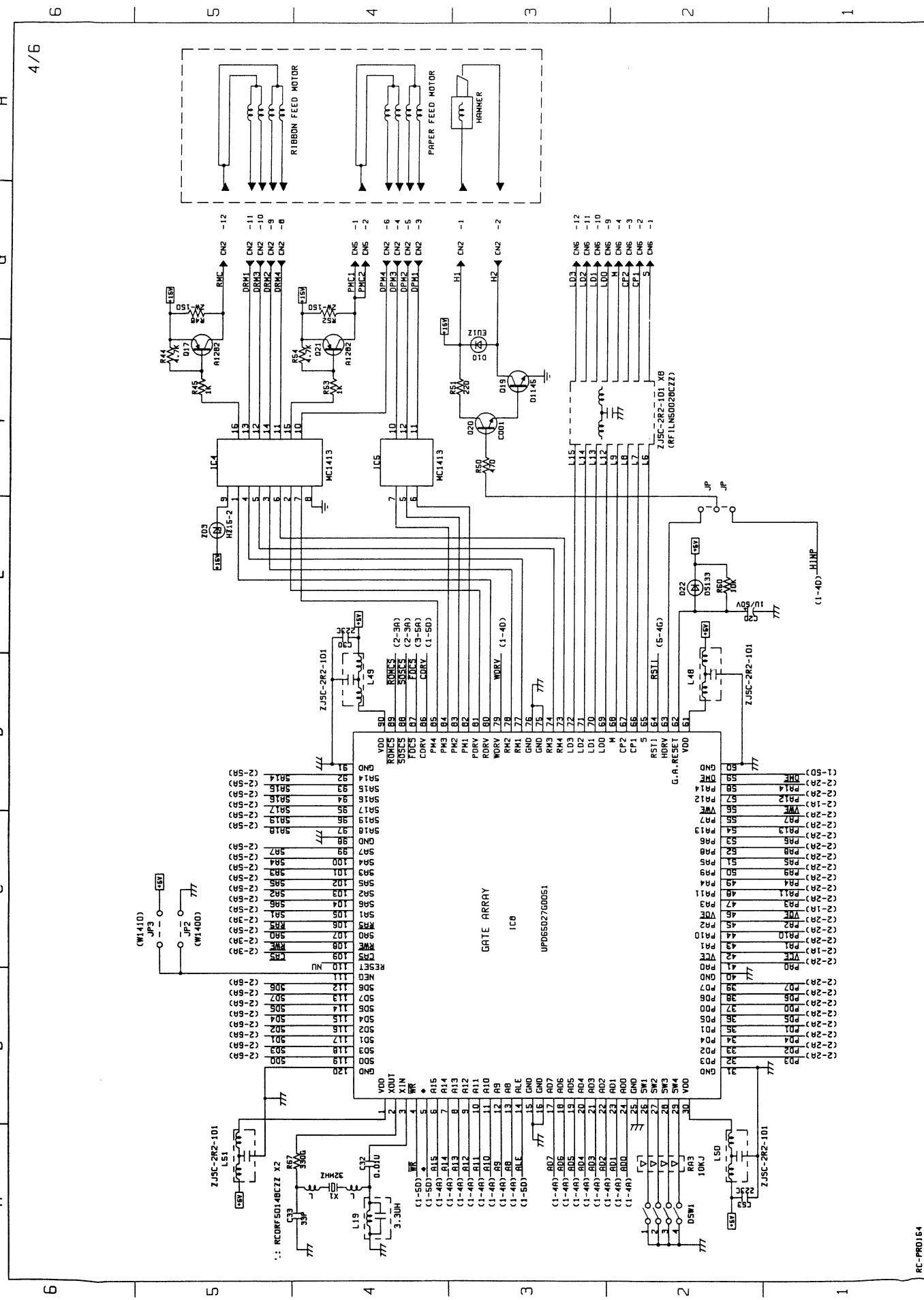


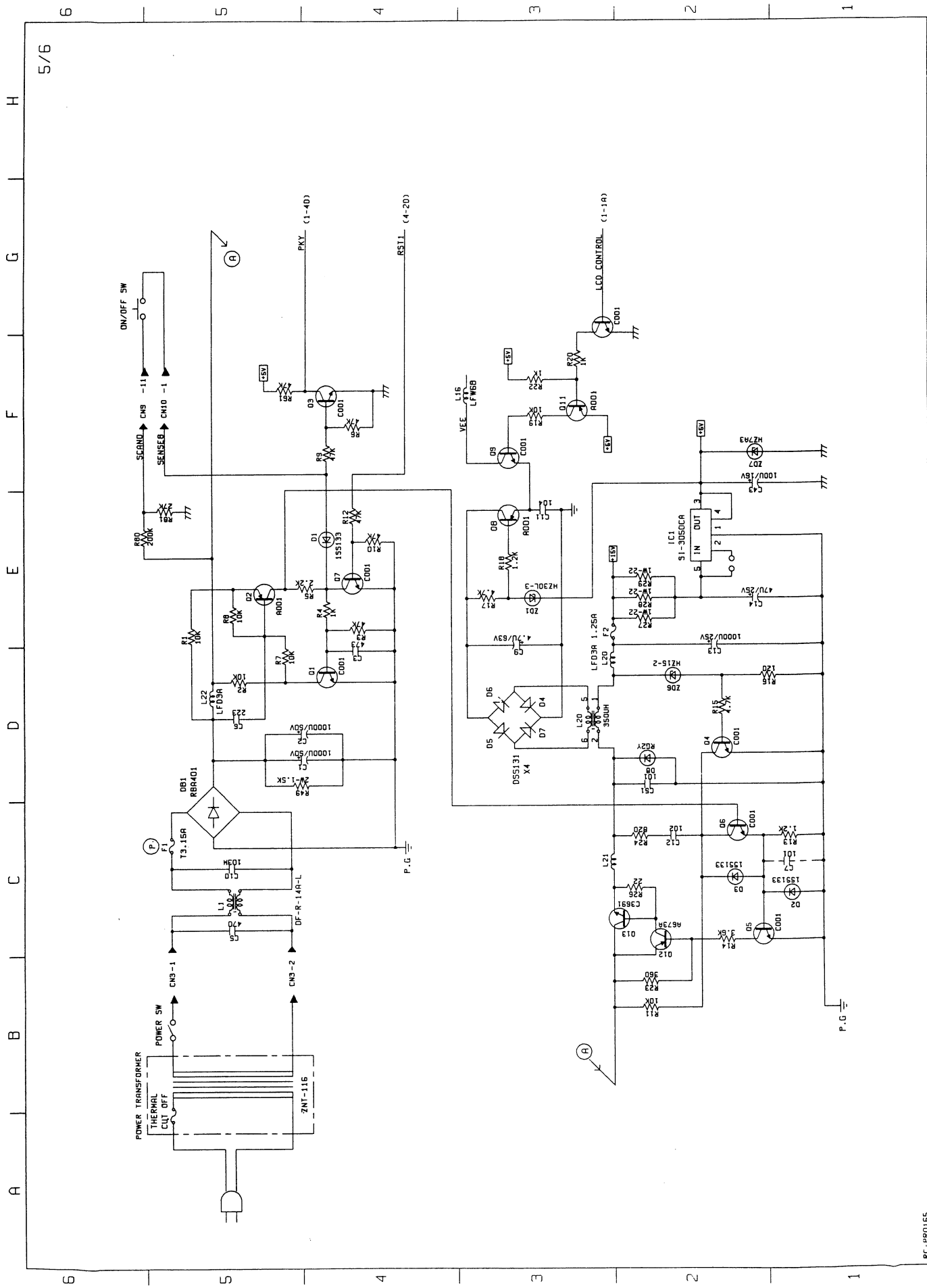
12-3. Circuit diagram

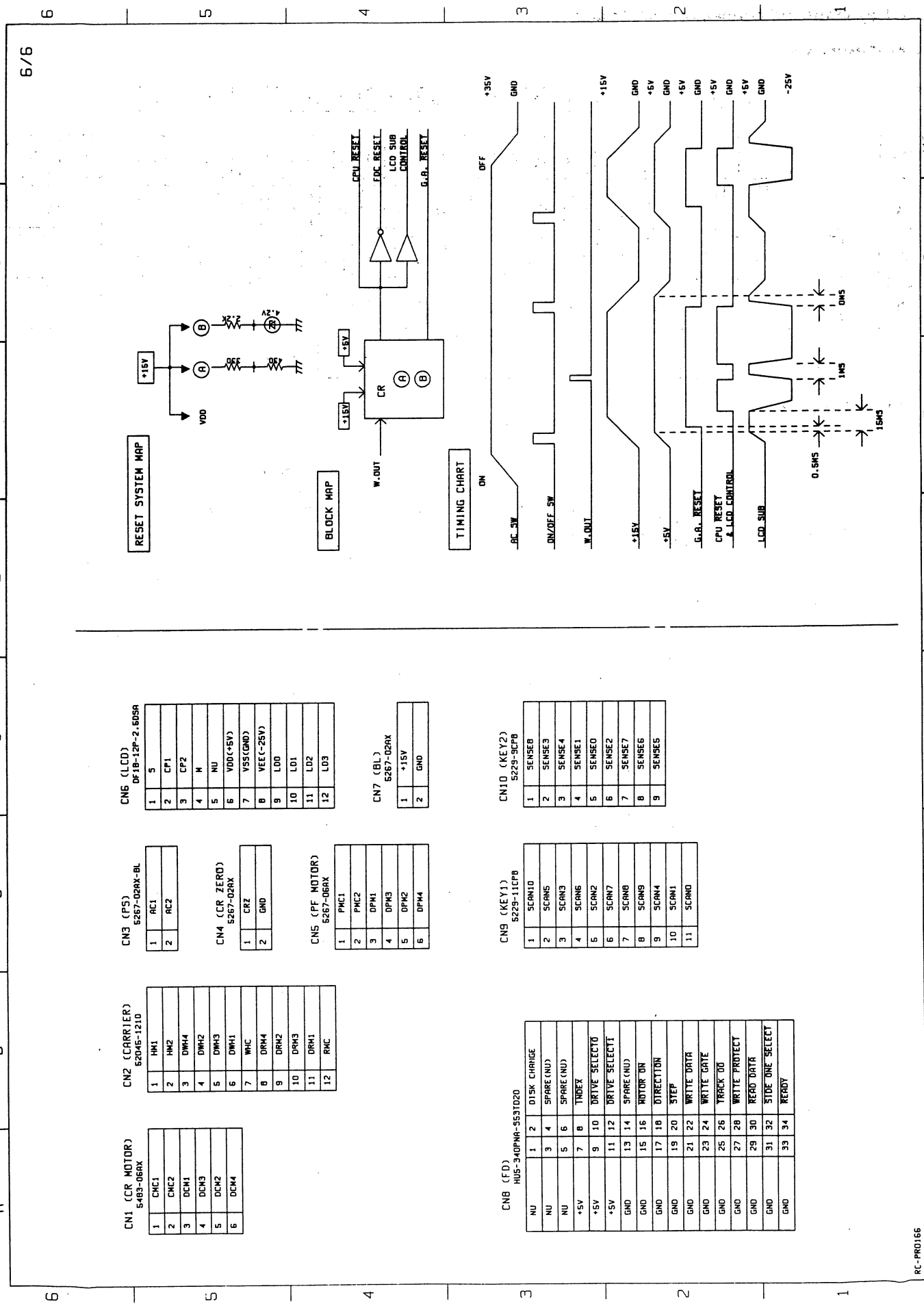



2/6
ROM
RAM
IC13
MN234000
(LH53B011)
IC12
27C256
(27C4001)
IC11
IC10
LH2464-10
IC7
TC51832-10
IC3
74LS08
D11
DS133
L45
IFS206-8471M
JP4
JP5
JP6
JP7
JP8
JP9
RC-PR0162


3/6
FLOPPY DISK CONTROLLER
IC14
UPD72068GF-389
DISK CHANGE
INDEX
DRIVE SELECT0
DRIVE SELECT1
MOTOR ON
DIRECTION
STEP
WRITE DATA
WRITE GATE
TRUCK 00
WRITE PROTECT
READ DATA
SIDE ONE SELECT
READY
RESET
RD
WR
FDCS
SD0
SD0 - SD7
IC
32MHZ
RC-PRD163

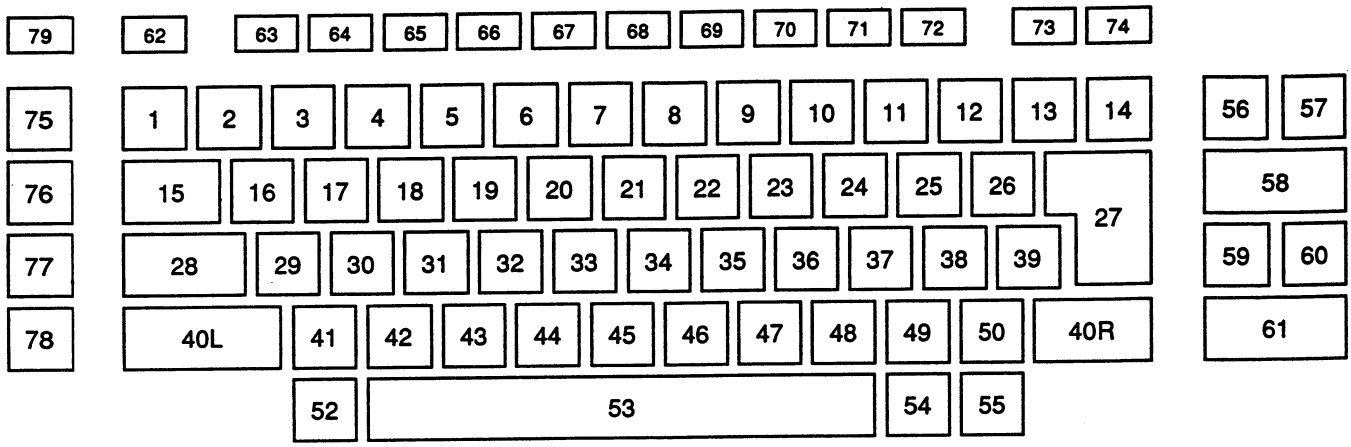

RIBBON FEED MOTOR
PAPER FEED MOTOR
HAMMER
GATE ARRAY
IC8
UPD65027GD051
MC1413
IC4
IC5
ZJSC-2R2-101
RC-PRD164


5/6
ON/OFF SW
CN9 -11
CN10 -1
SCAN0
SENSE0
PKY (1-4D)
RST1 (4-2D)
LCD CONTROL (1-1A)
POWER SW
CN3-1
CN3-2
DF-R-14A-L
POWER TRANSFORMER
THERMAL CUT OFF
ZNT-116
DB1 RBR401
F1 T3.15A
IC1 S1-3050CA
LFD3A 1.25A
DSS131 X4
P.G
RC-PR0165

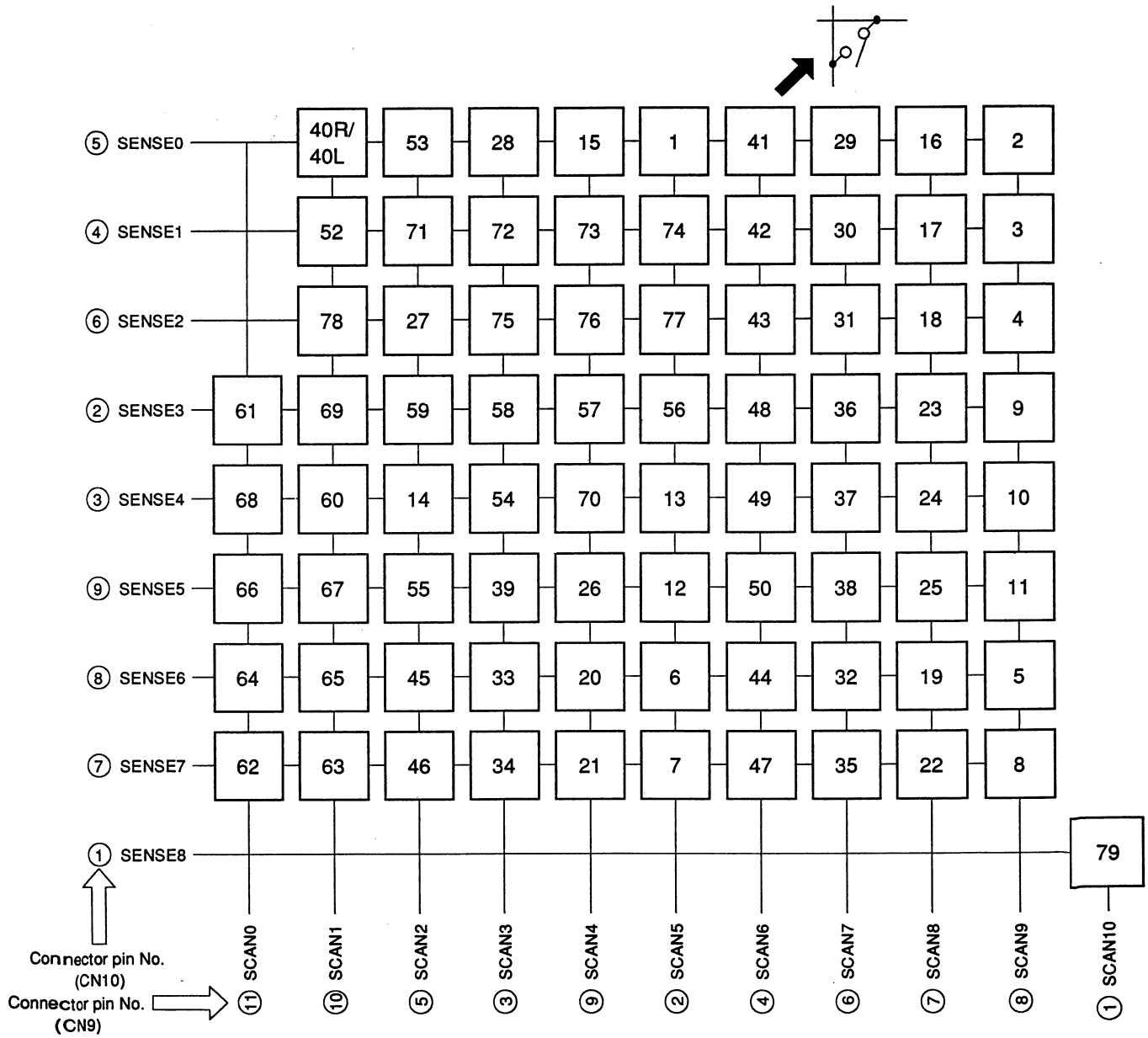

6/6
RESET SYSTEM MAP
+15V
VDD
OFF
BLOCK MAP
CPU RESET
FDC RESET
LCD SUB CONTROL
G.A. RESET
+5V
+15V
CR
W.OUT
TIMING CHART
ON
OFF
+35V
GND
AC SW
ON/OFF SW
W.OUT
+15V
GND
+5V
GND
+5V
GND
+5V
GND
+5V
GND
-25V
G.A. RESET
CPU RESET & LCD CONTROL
LCD SUB
0.5MS
1MS
0MS
15MS
CN1 (CR MOTOR) 5483-06AX
CN2 (CARRIER) 62046-1210
CN3 (PS) 5267-02AX-BL
CN4 (CR ZERO) 5267-02AX
CN5 (PF MOTOR) 5267-06AX
CN6 (LCD) DF18-12P-2.6DSA
CN7 (BL) 5267-02AX
CN8 (FD) HUS-340PNA-553TD20
CN9 (KEY1) 5229-11CPB
CN10 (KEY2) 5229-9CPB
RC-PRO166

12-4. Keyboard and connector signal name

1. Keyboard layout



2. Keyboard matrix



SHARP PARTS GUIDE

CONTENTS

1 Housing section

2 Assy, LCD

3 Printer main frame

4 Carrier assembly

5 Packing material & Accessories

6 Unit, main control PWB

8 Unit, carrier PWB

9 Unit, keyboard

10 Key top: Type-A

11 Key top: Type-B

12 Key top: Type-C

13 Key top: Type-D

14 Key top: Type-E

■ Index

DEFINITION

The definition of each Rank is as follows and also noted in the list.

A : Parts necessary to be stocked as High usage parts.
B : Parts necessary to be stocked as Standard usage parts.
C : Low usage parts.
D : Parts necessary for refurbish.
E : Unit parts recommended to be stocked for efficient after sales service.
Please note that the lead time for the said parts may be longer than normal parts.
S : Consumable parts.

Please note that the following parts used in Copier under the same description are classified into A or B Rank depending upon the place used.

Example : Gear made of Metal, Sprocket, Bearing, Belt made of Rubber, Spring clutch mechanism.
A Rank : The parts which may be with the revolution or loading
B Rank : Parts similar to A Rank parts, but are not include in Rank A.

Parts marked with "⚠" is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

DESTINATION TABLE

NOTE: *1. The number indicates the service manual for the destination that corresponds to the number (E.g. ①) on the front and back cover of this manual. As the destination (number) increases, it includes the numbers for old destinations.
*2. See Parts List in reference of part code.
*3. Indicates the type name of the applicable optional print wheel. See page 2-2 of the service manual for details.
*4. The default pitch means the factory-set print pitch. The pitch is determined by the hardware setting of the jumper contact on the control PWB and the software setting of the CPU (ROM) used. The setting is made to meet each country's specification and varies according to the destination.
*5. The number indicates the jumper contact number on the control PWB for software setting based on each country's specification. (Silk screen printed. E.g. J3)
(Please refer to the "[7] ELECTRICAL SET UP" of the Service manual how to setting.)

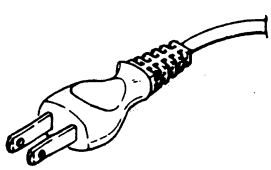
PA-W1410

	*1	*2		*2	*2	*2	*2	*2	*2	*3		*4	*5	*5				*3
	NO.	DESTINATION	CODE	AC CORD	INST. BOOK	CONTROL PWB, CPU	P.S. UNIT	KEY UNIT	PRINT WHEEL		DEFAULT PITCH	JUMPER CONTACT NUMBER	JUMPER SW SET UP (DSW1)				WHEEL NO.
									OPTION WHEEL	IN SAME PACKAGE PRINT WHEEL			SW1	SW2	SW3	SW4	
	1	USA, Guam	A	Type-A	Type-A	Type-A	Type-B	Type-A	Type-H	ZX-9176H	10	—	—	—	—	—	270
	2	Canada	M	A	B	B	B	B	H	ZX-9176H	10	—	—	○	—	—	270
	3	Sli Lanka	EA HAB	D	C	C	D	A	H	ZX-9176H	10	—	—	—	—	—	270
	4	Philippines	EA HAF	E	C	C	D	A	H	ZX-9176H	10	—	—	—	—	—	270
	5	Hong Kong	EA HAH	B	C	C	D	A	H	ZX-9176H	10	—	—	—	—	—	270
①	6	Indonesia	EA HAI	B	C	C	D	A	H	ZX-9176H	10	J4	—	—	—	—	270
	7	Barbados West Indies	EA HAJ	A	C	A	B	A	H	ZX-9176H	10	—	—	—	—	—	270
	8	Kuwait-2	EA HAK	B	C	C	F	A	H	ZX-9176H	10	—	—	—	—	—	270
	9	Malaysia	EA HAM	G	C	C	F	A	H	ZX-9176H	10	—	—	—	—	—	270
	10	Nigeria	EA HAN	G	C	C	D	A	H	ZX-9176H	10	—	—	—	—	—	270
	11	Singapore	EA HAS	G	C	C	F	A	H	ZX-9176H	10	—	—	—	—	—	270
	12	France,ivor/coast U.A. E-1	F	L	D	D	G	E	L	ZX-046L	12	J3, J4	○	—	—	—	269
②	13	Germany	G3	L	E	D	G	D	M	ZX-046M	12	J3, J4	—	—	—	—	268
	14	U, Kingdom	U	K	F	E	H	C	H	ZX-046H	12	J3	—	—	—	—	270

*1 NO.	*2 DESTINATION	*2 CODE	*2 AC CORD	*2 INST. BOOK	*2 CONTROL PWB, CPU	*2 P.S. UNIT	*2 KEY UNIT	*3 PRINT WHEEL OPTION WHEEL	*3 PRINT WHEEL IN SAME PACKAGE PRINT WHEEL	*4 DEFAULT PITCH	*5 JUMPER CONTACT NUMBER	*5 JUMPER SW SET UP (DSW1) SW1	SW2	SW3	SW4	*3 WHEEL NO.

PA-W1400

*1 NO.	*2 DESTINATION	*2 CODE	*2 AC CORD	*2 INST. BOOK	*2 CONTROL PWB, CPU	*2 P.S. UNIT	*2 KEY UNIT	*3 PRINT WHEEL OPTION WHEEL	*3 PRINT WHEEL IN SAME PACKAGE PRINT WHEEL	*4 DEFAULT PITCH	*5 JUMPER CONTACT NUMBER	*5 JUMPER SW SET UP (DSW1) SW1	SW2	SW3	SW4	*3 WHEEL NO.
① 1	USA, Guam	A	Type-A	Type-A	Type-A	Type-B	Type-A	Type-H	ZX-9176H	10	—	—	—	—	—	270



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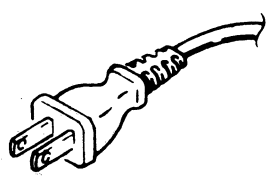

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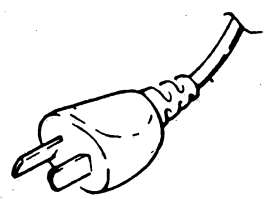

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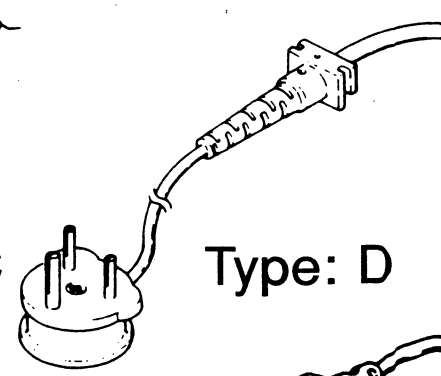

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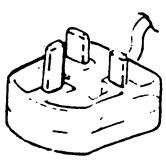

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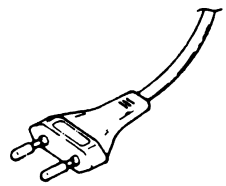

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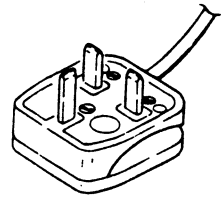

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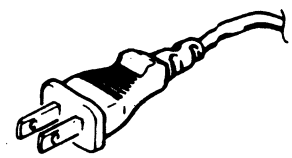
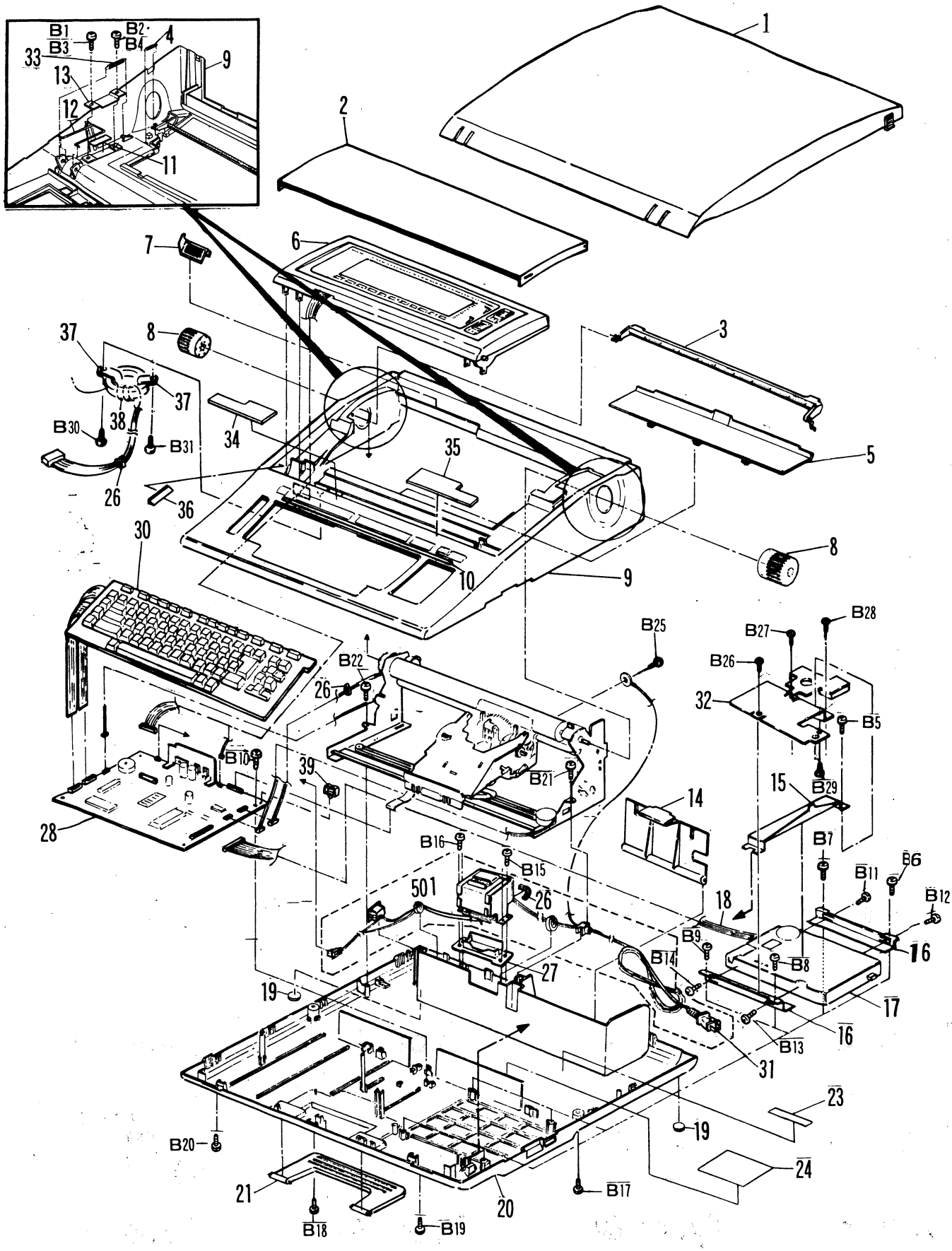


Type: H

PAW1410

1 Housing section



1 Housing section

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
B01	LX-BZ5058BCZZ	AA		C	Screw (3×6)	○	○
B02	LX-BZ5058BCZZ	AA		C	Screw (3×6)	○	○
B03	LX-BZ5058BCZZ	AA		C	Screw (3×6)	○	○
B04	LX-BZ5058BCZZ	AA		C	Screw (3×6)	○	○
B05	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B06	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B07	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B08	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B09	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B10	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B11	XBPSD30P04000	AA		C	Screw (3×4)	○	○
B12	XBPSD30P04000	AA		C	Screw (3×4)	○	○
B13	XBPSD30P04000	AA		C	Screw (3×4)	○	○
B14	XBPSD30P04000	AA		C	Screw (3×4)	○	○
B15	XUPSD40P14000	AA		C	Screw (4×14)	○	○
B16	XUPSD40P14000	AA		C	Screw (4×14)	○	○
B17	XUPSD40P16000	AA		C	Screw (4×16)	○	○
B18	XUPSD40P16000	AA		C	Screw (4×16)	○	○
B19	XUBSD30P12000	AA		C	Screw (3×12)	○	○
B20	XUBSD30P12000	AA		C	Screw (3×12)	○	○
B21	XUPSD40P12000	AA		C	Screw (4×12)	○	○
B22	XUPSD40P12000	AA		C	Screw (4×12)	○	○
B25	XBPBZ40P06K00	AA		C	Screw (4×6K)(HAB,HAM,HAN,HAS) (Ref.destination table CODE)		○
B26	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B27	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B28	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B29	XUPSD30P06000	AA		C	Screw (3×6)	○	○
B30	XUBSD30P08000	AA		C	Screw (3×8)	○	○
B31	XUBSD30P08000	AA		C	Screw (3×8)	○	○
1	PCÖVP5081CHZA	AY	N	D	Cover,key (For Europe··except U,Kingdom)		○
	PCÖVP5081CHZZ	AW	N	D	Cover,key (Other countries)	○	○
2	GiTAT5067CHZA	AP	N	D	Support,paper (For Europe··except U,Kingdom)		○
	GiTAT5067CHZZ	AP	N	D	Support,paper (Other countries)	○	○
3	NSFTZ5113CHZA	AK	N	C	Bar,bail (For Europe··except U,Kingdom)		○
	NSFTZ5113CHZZ	AL	N	C	Bar,bail (Other countries)	○	○
4	MSPRP5205CHZZ	AB	N	C	Spring,bail bar	○	○
5	PCÖVP5080CHZA	AK	N	C	Cover,printer (For Europe··except U,Kingdom)		○
	PCÖVP5080CHZZ	AL	N	C	Cover,printer (Other countries)	○	○
6	———				Unit,Display (Ref.block[2])	○	○
7	PGiDM5057CHZB	AE	N	C	Guide,paper (Except Europe)	○	○
	PGiDM5057HHZD	AF	N	C	Guide,paper (For Europe··except U,Kingdom)		○
	PGiDM5057HHZB	AF	N	C	Guide,paper (U,Kingdom only)		○
8	JKNBZ5120CHZZ	AE		C	Knob,platen (Except Europe)	○	○
	JKNBZ5120HHZA	AB		C	Knob,platen (For Europe··except U,Kingdom)		○
	JKNBZ5120HHZZ	AB		C	Knob,platen (U,Kingdom only)		○
9	CCABA5116CH04	BB	N	D	Housing,upper (Except Europe)	○	○
	CCABA5116HH05	AR	N	D	Housing,upper (For Europe··except U,Kingdom)		○
	CCABA5116HH02	AR	N	D	Housing,upper (U,Kingdom only)		○
10	TLABH5241CHZZ	AH	N	C	Label,function (Except Europe)	○	○
	TLABH5241HHZA	AH	N	C	Label,function (For Europe··except U,Kingdom)		○
	TLABH5241HHZZ	AH	N	C	Label,function (U,Kingdom only)		○
11	LPLTM5111CHZZ	AH	N	C	Plate,spring	○	○
12	MARMM5017CHZZ	AK	N	C	Arm,friction	○	○
13	MSPRP5203CHZZ	AF	N	C	Spring,friction	○	○
14	PCÖVP5082CHZA	AG	N	D	Cover,AC cord (For Europe··except U,Kingdom)		○
	PCÖVP5082CHZZ	AF	N	D	Cover,AC cord (Other countries)	○	○
15	LANGH5179CHZZ	AH	N	C	Angle,key	○	○
16	LANGT5178CHZZ	AK	N	C	Angle,FDD	○	○
17	DUNTK6768BCZZ	BS	N	E	Unit,FDD	○	○
18	QCNW-5281BCZZ	AP	N	C	Cable,FDD	○	○
19	GLEGG5001CHZZ	AD	N	C	Rubber foot	○	○
20	GCABB5117CHZC	AY	N	D	Housing,bottom (Except Europe)	○	○
	GCABB5117CHZE	AZ	N	D	Housing,bottom (For Europe··except U,Kingdom)		○
	GCABB5117CHZD	BB	N	D	Housing,bottom (U,Kingdom only)		○
21	JHNDP5002CHZA	AG	N	D	Handle (For Europe··except U,Kingdom)		○
	JHNDP5002CHZZ	AF	N	D	Handle (Other countries)	○	○
23	TCAUH5051BCZZ	AA		C	Label, caution (Except Europe)	○	○
	TCAUH5051HHZZ	AA		C	Label, caution (For Europe)		○
24	TLABH5174CHZZ	AC		C	Label,wheel setting (Except Europe)	○	○
26	LBNDJ2003SCZZ	AA		C	Cable clamp (large)(CV-100)(Except Europe)	○	○
	LBNDJ5006HHZZ	AA		C	Cable clamp (For Europe)		○
27	PCÖVP5077CHZZ	AD		C	Cover,terminal	○	○
28	CPWBF5186CH01	BY	N	E	Unit,Main control PWB (Type-A) (Ref.block[6])	○	○
	CPWBF5186CH06	CC	N	E	Unit,Main control PWB (Type-B) (Ref.block[6])		○
	CPWBF5186CH07	CB	N	E	Unit,Main control PWB (Type-C) (Ref.block[6])		○
	CPWBF5186HH02	BZ	N	E	Unit,main control PWB (Type-D) (Ref.block[6])		○
	CPWBF5186HH03	BZ	N	E	Unit,main control PWB (Type-E) (Ref.block[6])		○
30	———				Unit,keyboard (Ref.block[9])	○	○
⚠ 31	QACCD1010DHN3	AQ		B	AC cord (Type-A) (Ref.destination table)	○	○
⚠	QACCE3120QCN3	AM		B	AC cord (Type-B) (Ref.destination table)		○

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1 Housing section

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
⚠ 31	QACCZ7124QCN1	AW		B	AC cord (Type-D) (Ref.destination table)		○
⚠	QACCZ1122QCZZ	AH		B	AC cord (Type-E) (Ref.destination table)		○
⚠	QACCF7121QCN1	AW		B	AC cord (Type-G) (Ref.destination table)		○
⚠	QACCB7120JHN1	AU		B	AC cord (Type-K) (Ref.destination table)		○
⚠	QACCE3120JHN3	AN		B	AC cord (Type-L) (Ref.destination table)		○
32	PSLDM5024BCZZ	AK	N	C	Plate,shield	○	○
33	MSPRT5208CHZZ	AC	N	C	Spring,tilt	○	○
34	PCUSS5040CHZZ	AE	N	C	Sheet L,display	○	○
35	PCUSS5041CHZZ	AE	N	C	Sheet R,display	○	○
36	PCUSS5039CHZZ	AB	N	C	Sheet,display	○	○
37	LBNDJ0005FCZZ	AB		C	Band	○	○
38	RCÖRF2023SCZZ	AH		C	Core (ESD-R-25D-8)	○	○
39	LHLDW0734FCZZ	AA		C	Cable holder	○	○
⚠ 501	DUNTK6770CHZZ	BC	N	E	Unit,power supply (120V)(Type-B) (Ref.destination table)	○	○
⚠	DUNTK6791CHZZ	BD	N	E	Unit,power supply (220V)(Type-D) (Ref.destination table)		○
⚠	DUNTK6790CHZZ	BD	N	E	Unit,power supply (240V)(Type-F) (Ref.destination table)		○
⚠	DUNTK6791HHZA	AY	N	E	Unit,power supply (220V)(Type-G) (Ref.destination table)		○
⚠	DUNTK6790HHZA	AY	N	E	Unit,power supply (240V)(Type-H) (Ref.destination table)		○

2 Ass'y,LCD

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
B01	XUBSD30P08000	AA		C	Screw (3×8)	○	○
B02	XUBSD30P08000	AA		C	Screw (3×8)	○	○
B03	XUBSD30P08000	AA		C	Screw (3×8)	○	○
B04	XUBSD30P08000	AA		C	Screw (3×8)	○	○
B05	XUPSD30P06000	AA		C	Screw (3×6)	○	○
B06	XUPSD30P06000	AA		C	Screw (3×6)	○	○
B07	XUPSD30P06000	AA		C	Screw (3×6)	○	○
B08	XUPSD30P06000	AA		C	Screw (3×6)	○	○
B09	XUPSD30P06000	AA		C	Screw (3×6)	○	○
W01	XWHSD40−05080	AA		C	Washer	○	○
1	GCABD5119CHZA	AT	N	D	Cabinet B,display (For Europe··except U,Kingdom)		○
	GCABD5119CHZB	AU	N	D	Cabinet B,display (Other countries)	○	○
2	LANGT5181CHZA	AN	N	C	Angle,stay	○	○
3	LPLTP5112BCZZ	BA	N	C	Plate		○
4	PGUMS5045CHZA	AF	N	C	Rubber A,stay	○	○
5	QCNW−5282BCZZ	AN	N	C	Cable,display−M	○	○
6	CCNW−5284CH01	AC	N	C	Unit,slide VR cable		○
⚠ 7	DUNTK6773BCZZ	AZ	N	E	Unit,inverter		○
8	RLMPD5001BCZZ	AW	N	B	CCFT		○
9	PSHEZ5073BCZZ	AE	N	C	Sheet,collection		○
10	NSFTP5114CHZZ	AE	N	C	Pin,tilt	○	○
11	MSPRP5204CHZZ	AB	N	C	Spring,tilt	○	○
12	GCABD5118CHZE	AT	N	D	Cabinet A,Display	○	
	GCABD5118CHZG	AT	N	D	Cabinet A,display (For Europe··except U,Kingdom)		○
	GCABD5118CHZF	AT	N	D	Cabinet A,display (Other countries)		○
13	JKNBZ5121CHZA	AD	N	C	Knob,variable resistor (For Europe··except U,Kingdom)		○
	JKNBZ5121CHZZ	AD	N	C	Knob,variable resistor (Other countries)	○	○
14	HDECP5046BCZZ	AV	N	D	Panel A,Dec.	○	
	HDECP5046BCZB	AV	N	D	Panel A,Dec. (For Europe··except U,Kingdom)		○
	HDECP5046BCZA	AV	N	D	Panel A,Dec. (Other countries)		○
15	PGUMS5046CHZZ	AC	N	C	Rubber B,stay	○	○
16	RCORF1005LCZZ	AG	N	C	Core		○
17	PGUMS5049BCZZ	AE	N	C	Rubber C,stay	○	○
18	TLABZ5310CHZZ	AA	N	C	Danger label		○
501	CCABD5118CH10	CQ	N	E	Unit,display (This includes №2,4,12,15,17,B5~B9,W1)	○	
	CCABD5118CH11	CQ	N	E	Unit,display(Except Europe) (This includes №2,4,12,15,17,B5~B9,W1)		○
	CCABD5118HH07	BQ	N	E	Unit,display(For Europe··except U,Kingdom) (This includes №2,4,12,15,17,B5~B9,W1)		○
	CCABD5118HH11	BQ	N	E	Unit,display(U,Kingdom only) (This includes №2,4,12,15,17,B5~B9,W1)		○

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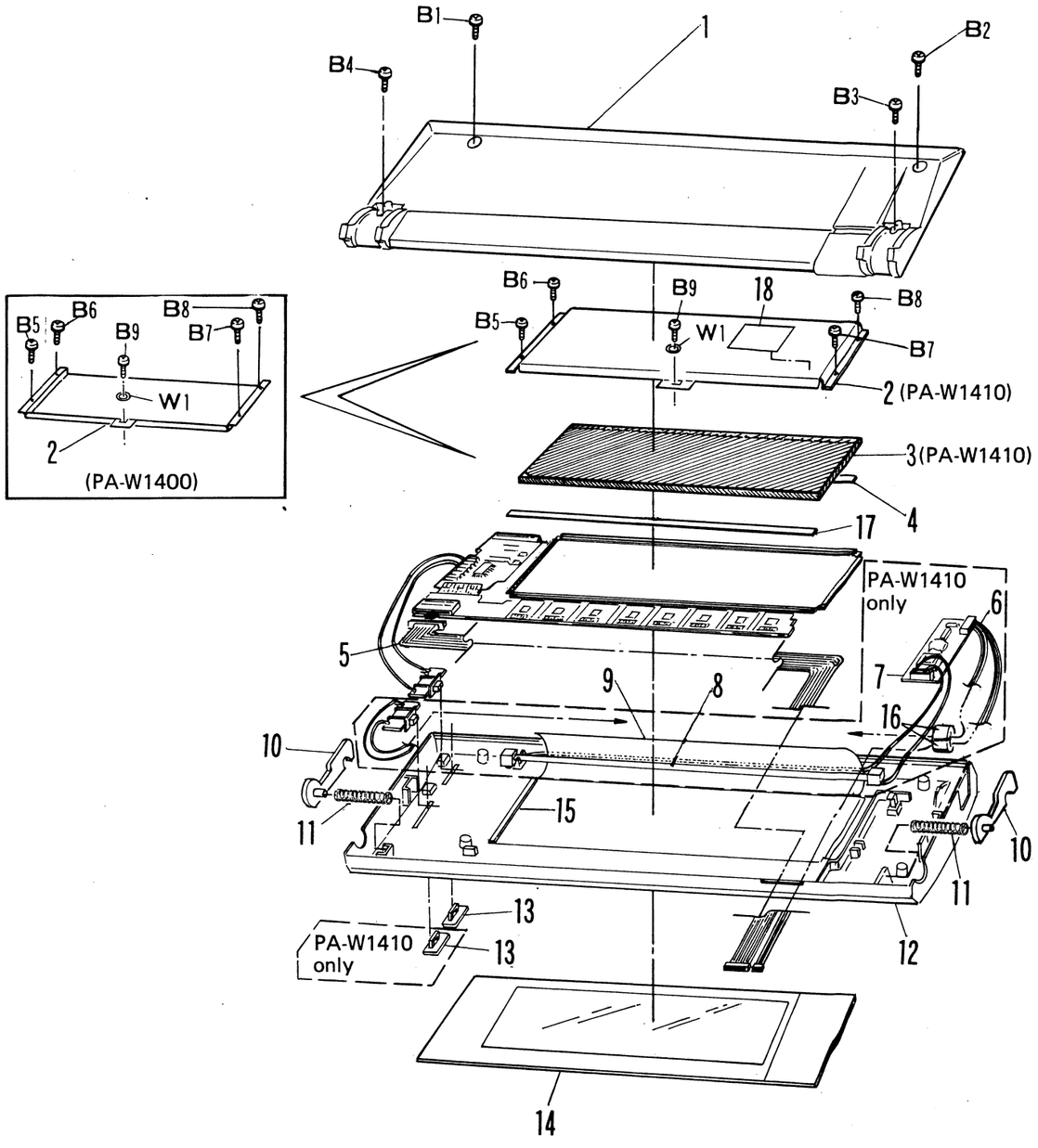
2 Ass'y,LCD



3 Printer main frame

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
B01	XXXSP40L05000	AA		C	Screw (4×5)	○	○
B02	XCPSD30P06000	AA		C	Screw (3×6)	○	○
B03	XCPSD30P06000	AA		C	Screw (3×6)	○	○
B04	XBPSD30P06KS0	AA		C	Screw (3×6KS)	○	○
B05	XHPSD30P05000	AA		C	Screw (3×5)	○	○
B06	XHPSD30P05000	AA		C	Screw (3×5)	○	○
B07	XBPSD20P10000	AA		C	Screw (2×10)	○	○
B08	XHPSD30P10000	AA		C	Screw (3×10)	○	○
B09	XBPSD30P16000	AA		C	Screw (3×16)	○	○
B10	XUPSD40P12000	AA		C	Screw (4×12)	○	○
1	MLEVP5092CHZC	AE	N	C	Lever,rerease (For Europe··except U,Kingdom)		○
	MLEVP5092CHZB	AE	N	C	Lever,rerease (Other countries)	○	○
2	NRÕLR5051CHZZ	AZ		C	Platen (Except Europe)	○	○
	NRÕLR5051HHZZ	AZ		C	Platen (For Europe)		○
3	NRÕLR5050CHZZ	AD		C	Roller,paper feed (Except Europe)	○	○
	NRÕLR5050HHZZ	AB		C	Roller,paper feed (For Europe)		○
4	LHLDR5053CHZZ	AL		C	Holder,roller	○	○
5	PGiDM5056CHZZ	AF		C	Sheet,guide (Except Europe)	○	○
	PGiDM5056HHZZ	AE		C	Sheet,guide (For Europe)		○
6	LANGF5106CHZZ	AE		C	Angle,roller holder (Except Europe)	○	○
	LANGF5106HHZZ	AD		C	Angle,roller holder (For Europe)		○
7	MSPRT5156BCZZ	AA		C	Spring, release	○	○
8	NSFTD5104CHZZ	AE		C	Shaft,drive gear (Except Europe)	○	○
	NSFTD5104HHZZ	AD		C	Shaft,drive gear (For Europe)		○
9	LFRM-5068CHZZ	AG	N	C	Frame,CR motor (Except Europe)	○	○
	LFRM-5068HHZZ	AD		C	Frame,CR-motor (For Europe)		○
10	RMÕTS5069BCZZ	AS	N	B	Motor,CR (Except Europe)	○	○
	RMÕTS5069HHZZ	AS		B	Motor,CR (For Europe)		○
11	NGERH5128CHZZ	AD		C	Gear,drive	○	○
12	LPLTP5108CHZZ	AC		C	Support,drive gear	○	○
13	NBLTT5015BCZZ	AE	N	B	Belt,timing (Except Europe)	○	○
	NBLTT5015HHZZ	AF		B	Belt,timing (For Europe)		○
14	NSFTD5089CHZZ	AP		C	Shaft,slide (Except Europe)	○	○
	NSFTD5089HHZA	AM		C	Shaft,slide (For Europe)		○
15	NPLYB5033CHZZ	AC		C	Pulley	○	○
16	NSFTA5110CHZZ	AC	N	C	Shaft,pulley (Except Europe)	○	○
	NSFTA5110HHZZ	AC		C	Shaft,pulley (For Europe)		○
17	MSPRT5180CHZZ	AB		C	Spring,PF holder	○	○
18	CHLDZ5052CH03	AF	N	C	Unit,PF holder (Except Europe)	○	○
	CHLDZ5052HH03	AF		C	Unit,PF holder (For Europe)		○
19	CGERH5110CH01	AK		C	Gear,platen (Except Europe)	○	○
	CGERH5110HH01	AQ		C	Gear,platen (For Europe)		○
20	NGERH5109CHZA	AC		C	Gear,PF idler	○	○
21	QSW-F5045BCZZ	AD		B	Sensor,initial	○	○
22	QCNW-5264CHZZ	AF		C	Cable,sensor (Except Europe)	○	○
	QCNW-5264HHZZ	AD		C	Cable,sensor (For Europe)		○
23	RMÕTS5068BCZZ	AS	N	B	Motor,PF (Except Europe)	○	○
	RMÕTS5068HHZZ	AS		B	Motor,PF (For Europe)		○
24	LBNDJ2003SCZZ	AA		C	Wire,band (Except Europe)	○	○
	LBNDJ5006HHZZ	AA		C	Wire,band (For Europe)		○
25	PTPEZ5023BCZZ	AA		C	Tape,double sided (Except Europe)	○	○
26	QCNW-5302HHZZ	AB	N	C	Wire,earth (For Europe)		○
501	CDAiH5035CH04	BP	N	E	Carrier assembly (Except Europe) (Ref.block 4)	○	○
	CDAiH5035HH03	BR	N	E	Carrier assembly(For Europe) (Ref.block 4)		○

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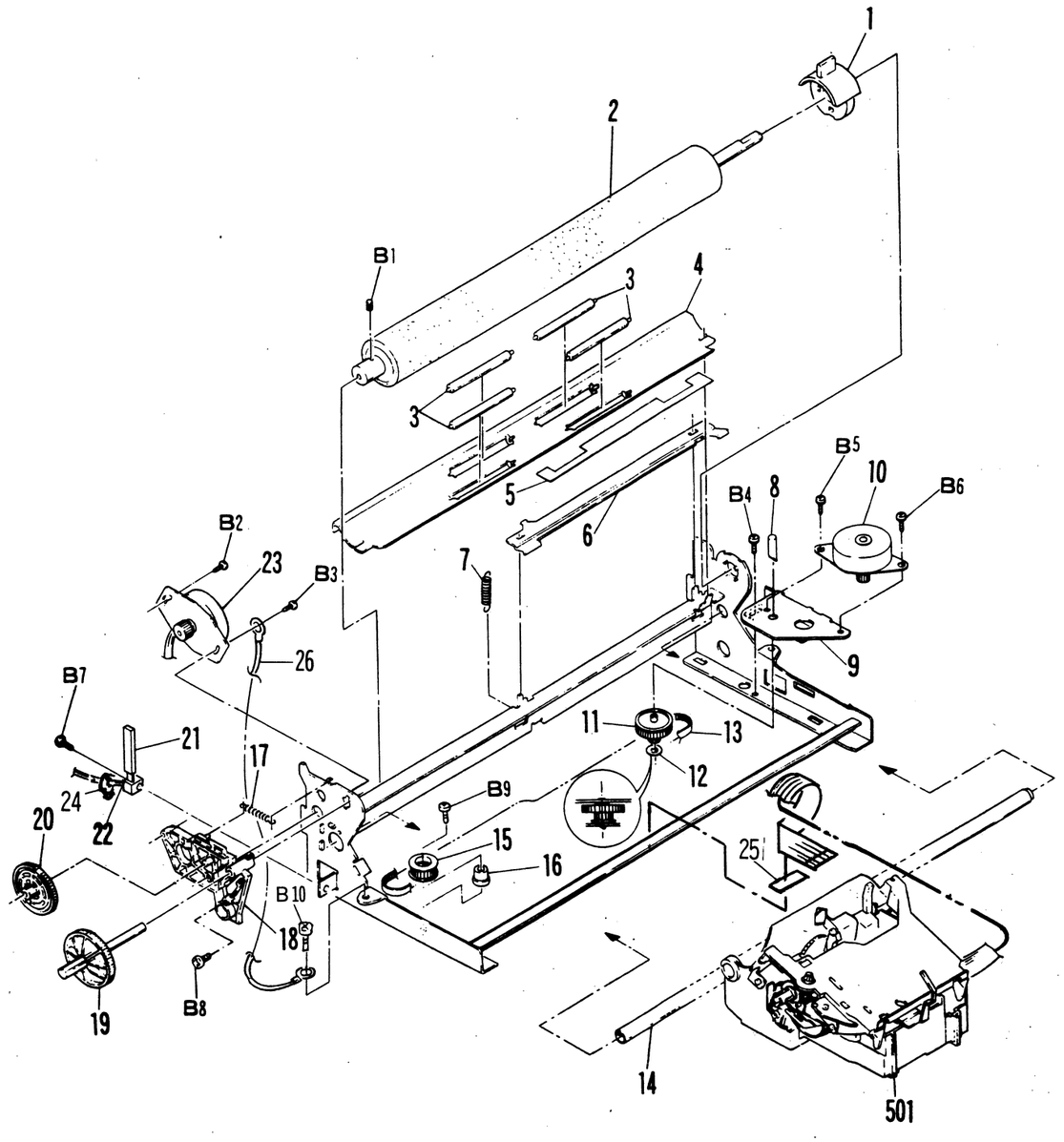
3 Printer main frame



4 Carrier assembly

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
B01	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B02	XUPSD30P08000	AA		C	Screw (3×8)	○	○
B09	LX-BZ5111CHZZ	AA		C	Screw (Except Europe)	○	○
	LX-BZ5111HHZZ	AB		C	Screw (For Europe)		○
B10	XUPSD30P08000	AA		C	Screw (3×8)		○
B13	LX-BZ5127BCZZ	AA		C	Screw	○	○
B14	LX-BZ5127BCZZ	AA		C	Screw	○	○
B15	LX-BZ5123BCZZ	AA		C	Screw	○	○
B16	LX-BZ5123BCZZ	AA		C	Screw	○	○
B17	LX-BZ5128BCZZ	AA		C	Screw	○	○
B18	LX-BZ5128BCZZ	AA		C	Screw	○	○
E01	XRESJ30-06000	AA		C	E type ring	○	○
E02	XRESJ15-04000	AA		C	E type ring	○	○
E03	XRESJ30-06000	AA		C	E type ring	○	○
E04	XRESJ20-04000	AA		C	E type ring	○	○
1	LHLDZ5076CHZZ	AD	N	C	Holder R,tape	○	○
2	MSPRD5201CHZZ	AB	N	C	Spring,back tension	○	○
3	NROLP5045CHZZ	AA		C	Roller,guide	○	○
4	NGERH5132CHZZ	AD	N	C	Gear,cam	○	○
5	MSPRT5202CHZZ	AB	N	C	Spring,cam	○	○
6	PTME-5018CHZZ	AC	N	C	Ratchet S	○	○
7	PTME-5017CHZZ	AC	N	C	Ratchet L	○	○
8	MCAMP5031CHZZ	AD	N	C	Cam A	○	○
9	MCAMP5032CHZZ	AD	N	C	Cam B	○	○
10	NGERH5131CHZZ	AD	N	C	Gear,R-idle	○	○
11	NGERH5130CHZZ	AD	N	C	Gear,ratchet	○	○
12	MSPRD5206CHZZ	AB	N	C	Spring,gear	○	○
13	LPLTM5084BCZZ	AB		C	Plate,ribbon lock (Except Europe)	○	○
	LPLTM5084HHZZ	AB		C	Plate,ribbon lock (For Europe)		○
14	PTME-5019CHZZ	AD	N	C	RF-ratchet		○
15	NGERH5129CHZZ	AD	N	C	Gear,RF drive	○	○
16	LHLDZ5077CHZZ	AD	N	C	Holder L,tape	○	○
17	JKNBZ5119CHZZ	AC		C	Knob,RF drive	○	○
18	RMOTS5066BCZZ	AS	N	B	Motor,ribbon (Except Europe)	○	○
	RMOTS5066HHZZ	AS		B	Motor,ribbon (For Europe)		○
19	CHLDX5078CH03	AQ	N	C	Holder,ribbon (Except Europe)	○	○
	CHLDX5078HH03	BA		C	Holder,ribbon (For Europe)		○
21	LHLDZ5051CHZA	AG	N	C	Holder,paper (Except Europe)	○	○
	LHLDZ5051HHZA	AD		C	Holder,paper (For Europe)		○
22	PGiDM5061CHZZ	AF	N	C	Guide,wheel (Except Europe)	○	○
23	CGERH5107CH03	AH	N	C	Unit,wheel flange (Except Europe)	○	○
	CGERH5107HH03	AG		C	Unit,wheel flange 1 (For Europe)		○
24	MSPRC5151CHZZ	AA		C	Spring, wheel flange gear	○	○
25	MSPRT5150BCZZ	AA		C	Spring,zero sense	○	○
26	MLEVP5081CHZA	AB		C	Lever,zero sense	○	○
27	NGERH5108CHZZ	AC		C	Gear,wheel	○	○
28	NBRGM5043CHZZ	AA		C	Metal,wheel shaft	○	○
29	MSPRD5199CHZZ	AE		C	Spring,hammer	○	○
30	CANGZ5183CH01	AK		C	Ass'y,hammer 1	○	○
31	NSFTZ5074CHZA	AC		C	Shaft,hammer (Except Europe)	○	○
	NSFTZ5074HHZZ	AA		C	Shaft,hammer (For Europe)		○
33	CMAGE5020CH01	BA	N	B	Ass'y,hammer solenoid (Except Europe)	○	○
	CMAGE5020HH01	AZ	N	B	Ass'y,hammer solenoid (For Europe)		○
34	CPLTM5110CH02	AQ	N	C	Unit,motor plate (Except Europe)	○	○
	CPLTM5110HH04	AZ		C	Unit,motor plate (For Europe)		○
35	MSPRT5207CHZZ	AA	N	C	Spring,motor plate	○	○
36	RMOTS5067BCZZ	AS	N	B	Motor,wheel (Except Europe)	○	○
	RMOTS5067HHZZ	AS		B	Motor,wheel (For Europe)		○
37	LSTPP5039CHZZ	AD	N	C	Latch,lever	○	○
38	CPWBF5185CH01	AN	N	E	Unit,carriage PWB (Except Europe)	○	○
	CPWBF5185HH01	AS		E	Unit,carrier PWB (For Europe)		○
39	MLEVP5100CHZA	AE		C	Lever,wheel	○	○
41	LDAiH5035CHZA	AV	N	C	Base,carriage (Except Europe)	○	○
	LDAiH5035HHZA	BG		C	Base,carriage (For Europe)		○
42	MSPRC5118BCZZ	AA		C	Spring,cam follower	○	○
43	PAJS-5011CHZZ	AD	N	C	R-Adjuster	○	○
44	NSFTZ5108CHZZ	AG	N	C	Pin,adjust (Except Europe)	○	○
	NSFTZ5108HHZZ	AF		C	Pin,adjust (For Europe)		○
45	LANGG5175CHZZ	AD	N	C	Bar,tape feed	○	○
46	MSPRP5194CHZB	AE	N	C	Spring,wheel pressure (Except Europe)	○	○
47	LANGF5177CHZZ	AE	N	C	Angle,wheel spring (Except Europe)	○	○
48	LHLDX5079HHZZ	AB		C	Holder L,wheel cassette (For Europe)		○
49	LHLDX5080HHZZ	AB		C	Holder R,wheel cassette (For Europe)		○
50	LBNDJ2003SCZZ	AA		C	Band,wire (Except Europe)	○	○
	LBNDJ5006HHZZ	AA		C	Band,wire (For Europe)		○
	(Unit)						
901	CDAiH5035CH04	BP	N	E	Carrier assembly (Except Europe)	○	○
	CDAiH5035HH03	BR	N	E	Carrier assembly (For Europe)		○

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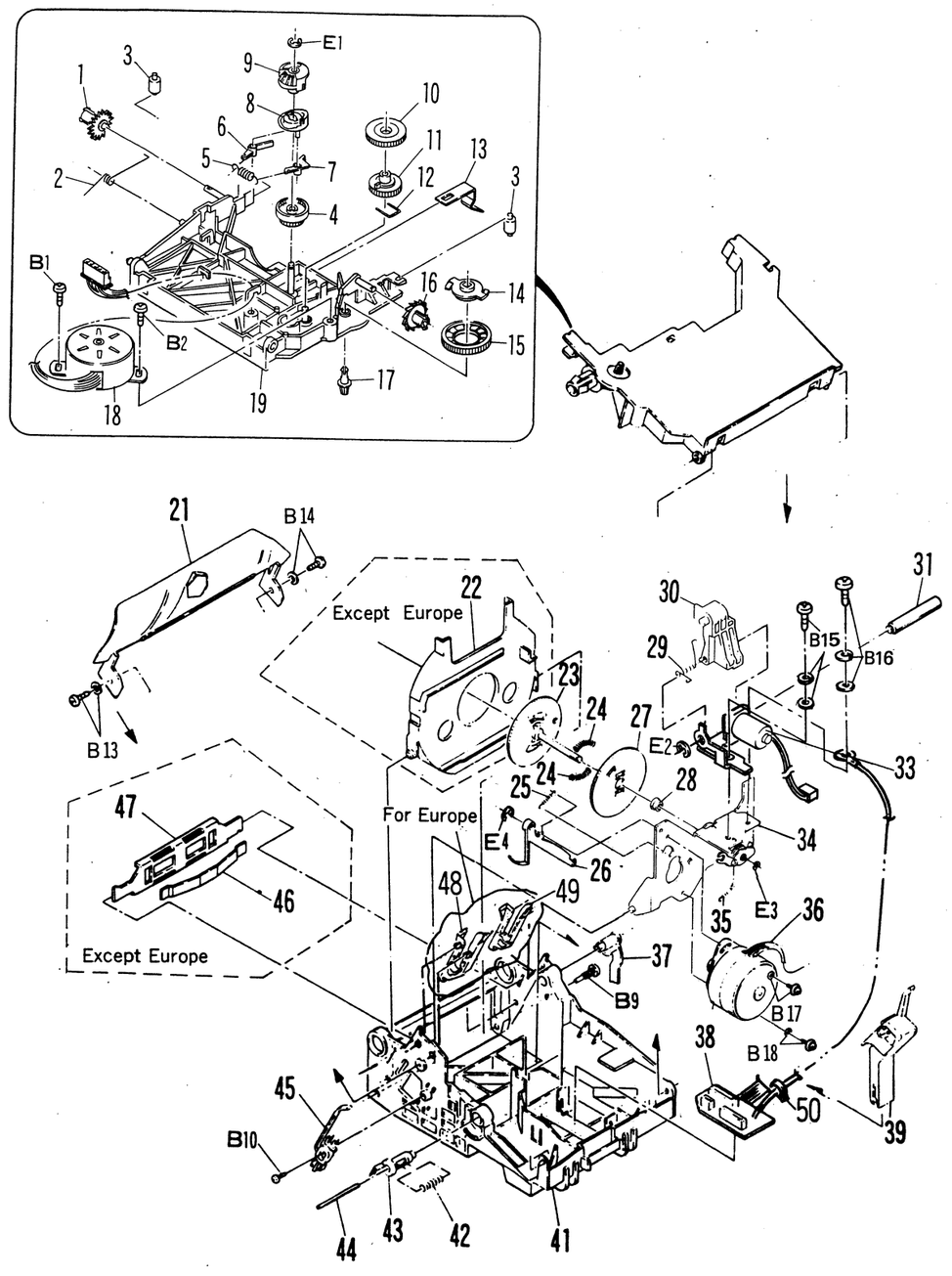
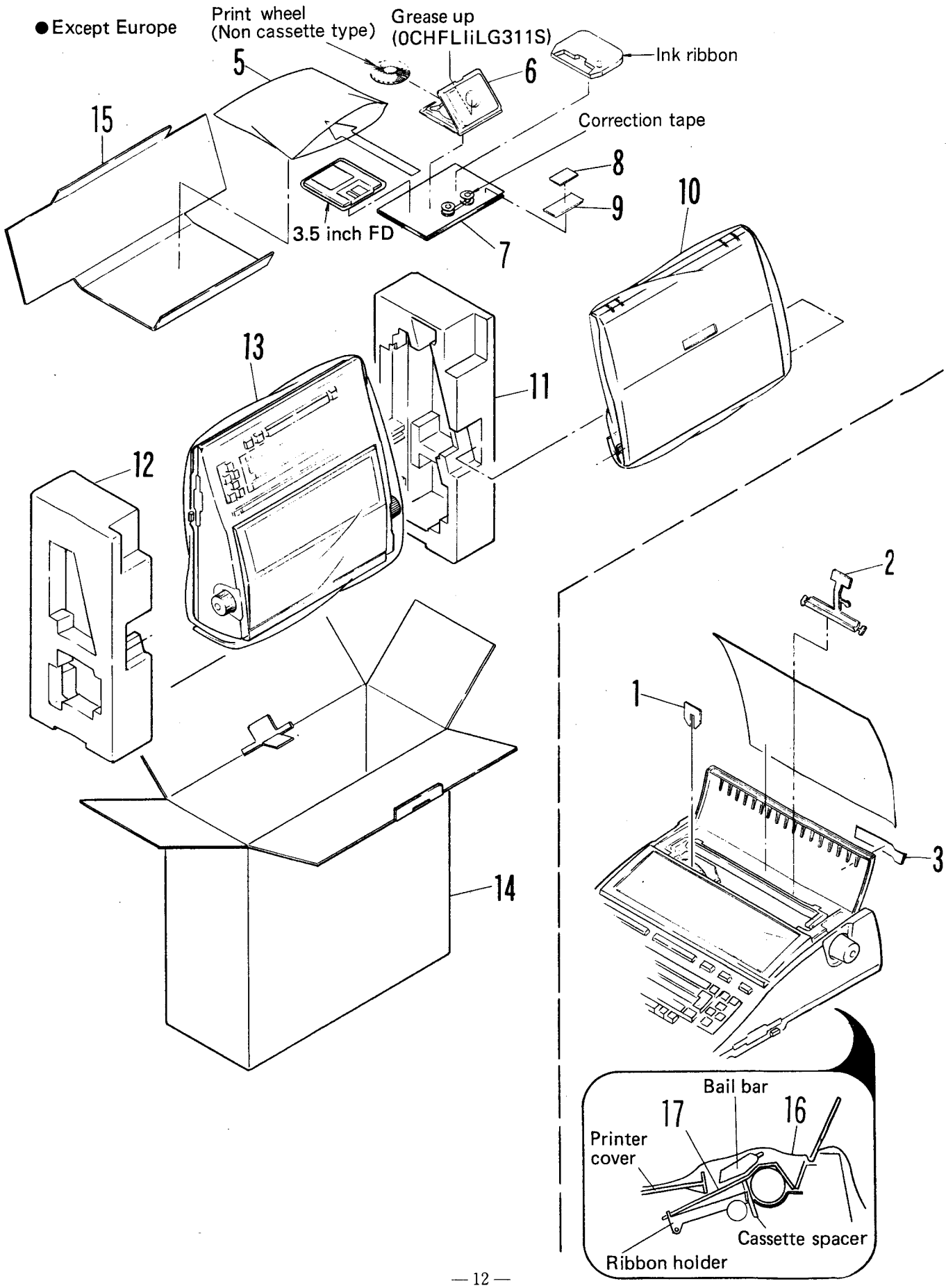
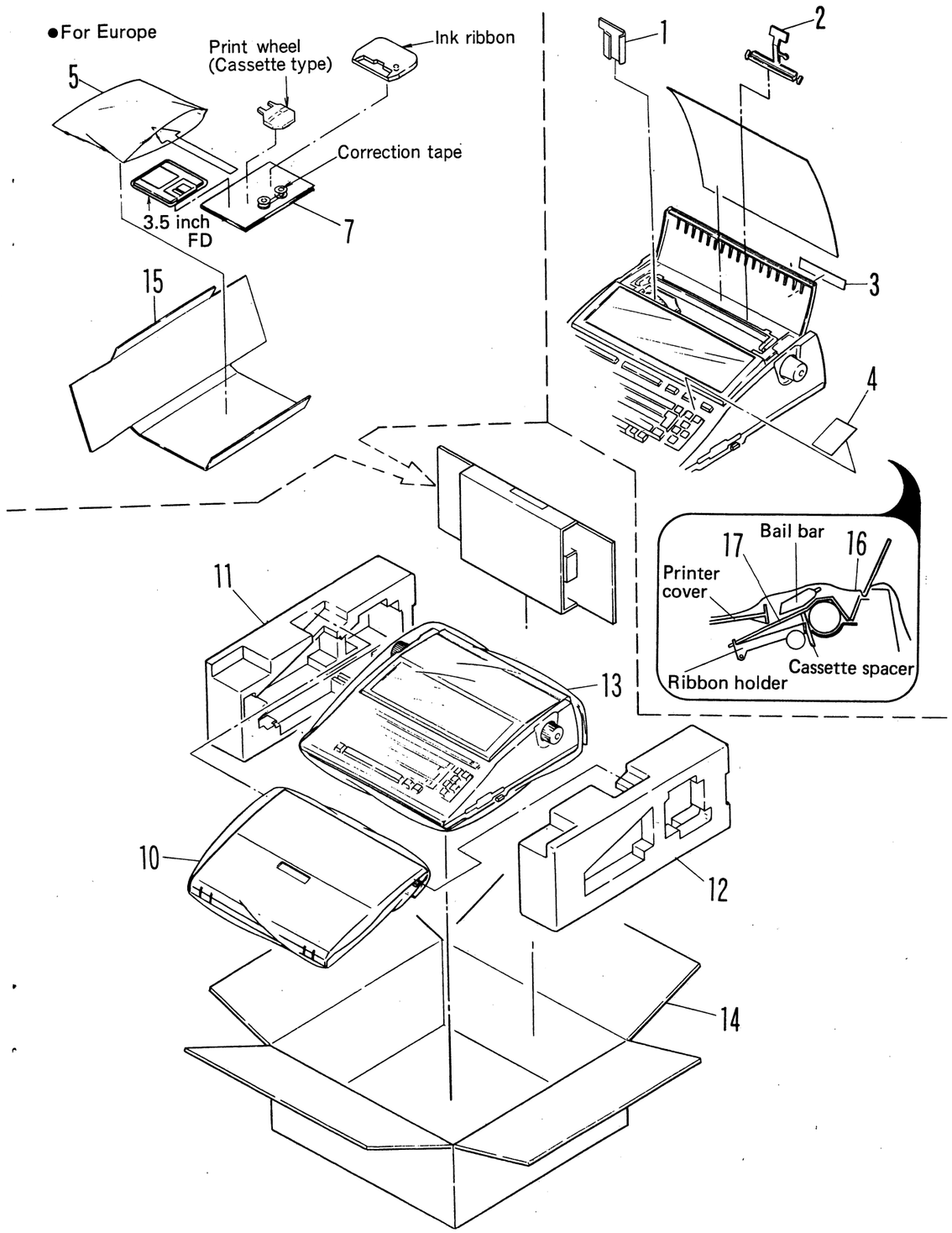
4 Carrier assembly



5 Packing material & Accessories



5 Packing material & Accessories



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5 Packing material & Accessories

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
1	SPAKA5938CHZZ	AD	N	D	Spacer,cassette (Except Europe)	○	○
	SPAKA5932HHZZ	AA	N	D	Spacer,cassette (For Europe)		○
2	LSTPZ5032CHZZ	AD		C	Stopper,carrier (Except Europe)	○	○
	LSTPZ5032HHZZ	AC		C	Stopper,carrier (For Europe)		○
3	TLABM5308HHZZ	AA	N	C	Label,pop (U,Kingdom only)		○
	TLABM5237CHZZ	AG	N	C	Label,pop (USA only)	○	
	TLABM5238CHZZ	AG	N	C	Label,pop (USA only)		○
4	TCAUH5096HHZZ	AK	N	C	Label,power key (For Europe)		○
5	SSAKH0004DHZZ	AB		D	Vinyl bag (280×300㎜)(Except Europe)	○	○
	SSAKH5012HHZA	AA		D	Vinyl bag (280×300㎜)(For Europe)		○
6	GCASP5027CHZZ	AG	N	D	Wheel case (Except Europe)	○	○
7	TiNSE5586BCZZ	AQ	N	D	Operation manual (Type−A) (Ref.destination table)	○	○
	TiNSK5592BCZZ	BB	N	D	Operation manual (Type−B) (Ref.destination table)		○
	TiNSE5593CHZZ	BB	N	D	Operation manual (Type−C) (Ref.destination table)		○
	TiNSF5599HHZZ	AX	N	D	Operation manual (Type−D) (Ref.destination table)		○
	TiNSG5598HHZZ	AX	N	D	Operation manual (Type−E) (Ref.destination table)		○
	TiNSE5596HHZZ	AX	N	D	Operation manual (Type−F) (Ref.destination table)		○
8	TLABZ5125CHZZ	AB		C	Label,service (USA only)	○	○
9	TGANE5021CHZZ	AF	N	D	Business reply mail (USA only)	○	○
10	SSAKH0012UCZZ	AB	N	D	Vinyl bag (450×360㎜)(Except Europe)	○	○
	SSAKH5011HHZA	AB		D	Vinyl bag (600×540×510㎜) (For Europe)		○
11	SPAKX5913CHZZ	AP	N	D	Packing cushion L (Except Europe)	○	○
	SPAKX5913HHZZ	AK	N	D	Packing cushion L (For Europe)		○
12	SPAKX5914CHZZ	AP	N	D	Packing cushion R (Except Europe)	○	○
	SPAKX5914HHZZ	AK	N	D	Packing cushion R (For Europe)		○
13	SSAKH0003DHZZ	AE		D	Vinyl bag for body(640×560㎜) (Except Europe)	○	○
	SSAKH5011HHZA	AB		D	Vinyl bag for body(600×540×510㎜) (For Europe)		○
14	CPAKC5916CH01	BE	N	D	Packing case (USA only)	○	
	CPAKC5917CH01	BD	N	D	Packing case (USA only)		○
	CPAKC5929CH01	BD	N	D	Packing case (CANADA only)		○
	SPAKC5929CHZZ	BD	N	D	Packing case (Except Europe··other countries)		○
	SPAKC5933HHZZ	AQ	N	D	Packing case (For Europe)		○
15	SPAKA5915CHZZ	AQ	N	D	Packing add,Accessories (Except Europe)	○	○
	SPAKA5915HHZZ	AF	N	D	Packing add,Accessories (For Europe)		○
16	PSHEZ5071CHZZ	AD		C	Vinyl sheet (Except Europe)	○	○
	PSHEZ5071HHZZ	AA		C	Vinyl sheet (For Europe)		○
17	SPAKA5937CHZZ	AE	N	D	Spacer (Except Europe)	○	○
	SPAKA5937HHZZ	AA	N	D	Spacer (For Europe)		○

6 Unit,Main control PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
1	RALMB5006SCZZ	AD		B	Buzzer (EFB−RD22C01) [BZ]	○	○
2	VCEAGU1HW108M	AF		C	Capacitor (50WV 1000μF) [C1]	○	○
3	VCEAGU1HW108M	AF		C	Capacitor (50WV 1000μF) [C2]	○	○
4	VCKYPU1HF473Z	AB		C	Capacitor (50WV 0.047μF) [C3]	○	○
5	VCKYPU1HB471K	AA		C	Capacitor (50WV 470pF) [C5]	○	○
6	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C6]	○	○
7	VCEAGU1JW476M	AB	N	C	Capacitor (63WV 47μF) [C9]	○	○
8	VCQYNU1HM103K	AA		C	Capacitor (50WV 0.010μF) [C10]	○	○
9	VCQYNU1HM104K	AB		C	Capacitor (50WV 0.1μF) [C11]	○	○
10	VCKYPU1HB102K	AA		C	Capacitor (50WV 1000pF) [C12]	○	○
11	VCEAGU1EW108M	AD		C	Capacitor (25WV 1000μF) [C13]	○	○
12	VCEAGU1EW476M	AB		C	Capacitor (25WV 47μF) [C14]	○	○
13	VCKYPU1HB101K	AA		C	Capacitor (50WV 100pF) [C15]	○	○
14	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C16]	○	○
15	VCKYPU1HB102K	AA		C	Capacitor (50WV 1000pF) [C18]	○	○
16	VCEAGU1HW105M	AA	N	C	Capacitor (50WV 1.0μF) [C20]	○	○
17	VCKYPU1HB102K	AA		C	Capacitor (50WV 1000pF) [C21]	○	○
18	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C22]	○	○
19	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C23]	○	○
20	VCKYPU1HB102K	AA		C	Capacitor (50WV 1000pF) [C25]	○	○
21	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C27]	○	○
22	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C28]	○	○
23	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C30]	○	○
24	VCQYNU1HM103K	AA		C	Capacitor (50WV 0.010μF) [C32]	○	○
25	VCCCPU1HH330J	AB		C	Capacitor (50WV 33PF) [C33]	○	○
26	VCCCPU1HH220J	AA		C	Capacitor (50WV 22PF) [C37]	○	○
27	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C38]	○	○
28	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C39]	○	○
29	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C42]	○	○
30	VCEAGU1CW107M	AB		C	Capacitor (16WV 100μF) [C43]	○	○
31	VCCCPU1HH150J	AA		C	Capacitor (50WV 15pF) [C44]	○	○
32	VCCCPU1HH150J	AA		C	Capacitor (50WV 15pF) [C45]	○	○
33	VCEAGU1CW106M	AA		C	Capacitor (16WV 10μF) [C46]	○	○
34	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C47]	○	○

6 Unit,Main control PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION		PAW 1400	PAW 1410
35	VCKYPU1HB102K	AA		C	Capacitor (50WV 1000pF)	[C48]	○	○
36	VCKYPU1HB101K	AA		C	Capacitor (50WV 100pF)	[C49]	○	○
37	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF)	[C50]	○	○
38	VCKYPU1HB101K	AA		C	Capacitor (50WV 100pF)	[C51]	○	○
39	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF)	[C52]	○	○
40	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF)	[C53]	○	○
41	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF)	[C54]	○	○
42	QCNCM1319CC0F	AC		C	Connector (6pin)	[CN1]	○	○
43	QCNCW5111BC1B	AD		C	Connector (12pin)	[CN2]	○	○
44	QCNCM5043BCZZ	AG		C	Connector (2pin)	[CN3]	○	○
45	QCNCM6865RC0B	AA		C	Connector (2pin)	[CN4]	○	○
46	QCNCM1319CC0F	AC		C	Connector (6pin)	[CN5]	○	○
47	QCNCM6932SC1B	AC		C	Connector (12pin)	[CN6]	○	○
48	QCNCM6865RC0B	AA		C	Connector (2pin)	[CN7]	○	○
49	QCNCM5128BC3D	AE	N	C	Connector (34pin)	[CN8]	○	○
50	QCNCM5091BC1A	AC		C	Connector (11pin)	[CN9]	○	○
51	QCNCM5091BC0i	AD	N	C	Connector (9pin)	[CN10]	○	○
52	VHDDSS133HV−1	AA		B	Diode (DSS133HV)	[D1]	○	○
53	VHDDSS133HV−1	AA		B	Diode (DSS133HV)	[D2]	○	○
54	VHDDSS133HV−1	AA		B	Diode (DSS133HV)	[D3]	○	○
55	VHDDSS131//−1	AA		B	Diode (DSS131)	[D4]	○	○
56	VHDDSS131//−1	AA		B	Diode (DSS131)	[D5]	○	○
57	VHDDSS131//−1	AA		B	Diode (DSS131)	[D6]	○	○
58	VHDDSS131//−1	AA		B	Diode (DSS131)	[D7]	○	○
59	VHDRG2Y////−1	AD		B	Diode (RG2Y)	[D8]	○	○
60	VHDDSS133HV−1	AA		B	Diode (DSS133HV)	[D9]	○	○
61	VHDEU1Z////−1	AB		B	Diode (EU1Z)	[D10]	○	○
62	VHDDSS133HV−1	AA		B	Diode (DSS133HV)	[D11]	○	○
63	VHDDSS133HV−1	AA		B	Diode (DSS133HV)	[D22]	○	○
64	VHDRBA401//−1	AE		B	Diode (RBA401)	[DB1]	○	○
65	QSW−Z2371RCZZ	AG	N	B	Switch (DAS−4)(Type−B,D)	[DSW1]		○
⚠ 66	QFS−C1025CCZZ	AF		B	Fuse (3.15A/250V)(Type−C,D,E)	[F1]		○
⚠ 67	QFS−B0301QCZZ	AE		A	Fuse (3.15A/250V)(Type−A,B)	[F1]	○	○
⚠ 68	QFS−Z1005BCZZ	AE	N	A	Fuse (1.25A/125V)	[F2]	○	○
69	VHiSi3050CA−1	AH	N	B	IC (SI3050CA)	[IC1]	○	○
70	VHiiR2339//−1	AG		B	IC (IR2339)	[IC2]	○	○
71	VHiT74LS09/−C	AD		B	IC (T74LS09)	[IC3]	○	○
72	VHiMC1413P/−1	AD		B	IC (MC1413P)(Type−A,B,C)	[IC4]	○	○
	VHiULN2003A−1	AN		B	IC (ULN2003A)(Type−D,E)	[IC4]		○
73	VHiMC1413P/−1	AD		B	IC (MC1413P)(Type−A,B,C)	[IC5]	○	○
	VHiULN2003A−1	AN		B	IC (ULN2003A)(Type−D,E)	[IC5]		○
74	VHiM54532P/−1	AU		B	IC (M54532P)	[IC6]	○	○
75	VHiT51832SL10	AX		B	IC (T51832SL10)	[IC7]	○	○
76	VHi65027GD051	AW	N	C	IC (65027GD051)	[IC8]	○	○
77	VHiM50734SP−1	AW		B	IC (M50734ASPL2)	[IC9]	○	○
78	VHiLH2464−10C	AR	N	C	IC (LH2464−10C)	[IC10]	○	○
79	VHiLH2464−10C	AR	N	C	IC (LH2464−10C)	[IC11]	○	○
81	VHiUPD72068GP	AY	N	B	IC (UPD72068GP)	[IC14]	○	○
82	RFiLN5001BCZZ	AH	N	C	Filter (DF−R−14A−L)	[L1]	○	○
83	RFiLN5002BCZZ	AH	N	C	Filter	[L6]	○	○
84	RFiLN5002BCZZ	AH	N	C	Filter	[L7]	○	○
85	RFiLN5002BCZZ	AH	N	C	Filter	[L8]	○	○
86	RFiLN5002BCZZ	AH	N	C	Filter	[L9]	○	○
87	RFiLN5002BCZZ	AH	N	C	Filter	[L12]	○	○
88	RFiLN5002BCZZ	AH	N	C	Filter	[L13]	○	○
89	RFiLN5002BCZZ	AH	N	C	Filter	[L14]	○	○
90	RFiLN5002BCZZ	AH	N	C	Filter	[L15]	○	○
91	RCŌRF5012BCZZ	AB	N	B	Core (LFW6B)	[L16]	○	○
92	RCiLZ5033BCZZ	AE	N	C	Coil (3.3μH)	[L19]	○	○
93	RCiLZ5032BCZZ	AH	N	C	Coil (350μH)	[L20]	○	○
94	RCŌRF5002BCZZ	AB		B	Core (B−01−T)	[L21]	○	○
95	RCŌRF5011BCZZ	AB	N	B	Core (LFD3A)	[L22]	○	○
96	RCŌRF5011BCZZ	AB	N	B	Core (LFD3A)	[L23]	○	○
97	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L24]	○	○
98	RCŌRF5002BCZZ	AB		B	Core (B−01−T)	[L25]	○	○
99	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L26]	○	○
100	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L27]	○	○
101	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L28]	○	○
102	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L29]	○	○
103	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L30]	○	○
104	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L31]	○	○
105	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L32]	○	○
106	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L33]	○	○
107	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L34]	○	○
108	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L35]	○	○
109	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L36]	○	○
110	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L37]	○	○
111	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L38]	○	○
112	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L39]	○	○
113	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L40]	○	○

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6 Unit,Main control PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION		PAW 1400	PAW 1410
114	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L41]	○	○
115	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L42]	○	○
116	RCŌRF5013BCZZ	AB	N	B	Core (LFW7B)	[L43]	○	○
117	RC−KZ1003LCJZ	AB	N	C	Capacitor (B471MA)	[L45]	○	○
118	RFiLN5002BCZZ	AH	N	C	Filter	[L48]	○	○
119	RFiLN5002BCZZ	AH	N	C	Filter	[L49]	○	○
120	RFiLN5002BCZZ	AH	N	C	Filter	[L50]	○	○
121	RFiLN5002BCZZ	AH	N	C	Filter	[L51]	○	○
122	RFiLN5002BCZZ	AH	N	C	Filter	[L52]	○	○
123	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q1]	○	○
124	VSDSA001−B/−1	AA		B	Transistor (DSA001−B)	[Q2]	○	○
125	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q3]	○	○
126	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q4]	○	○
127	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q5]	○	○
128	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q6]	○	○
129	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q7]	○	○
130	VSDSA001−B/−1	AA		B	Transistor (DSA001−B)	[Q8]	○	○
131	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q9]	○	○
132	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q10]	○	○
133	VSDSA001−B/−1	AA		B	Transistor (DSA001−B)	[Q11]	○	○
134	VS2SA673A//−1	AD		B	Transistor (2SA673A)	[Q12]	○	○
135	VS2SC3691−KLC	AG	N	B	Transistor (2SC3691−KLC)	[Q13]	○	○
136	VSDSA001−B/−1	AA		B	Transistor (DSA001−B)	[Q15]	○	○
137	VS2SA1282−/−1	AC		B	Transistor (2SA1282A)	[Q16]	○	○
138	VS2SA1282−/−1	AC		B	Transistor (2SA1282A)	[Q17]	○	○
139	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q18]	○	○
140	VS2SD1145−FGC	AD		B	Transistor (2SD1145)	[Q19]	○	○
141	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q20]	○	○
142	VS2SA1282−/−1	AC		B	Transistor (2SA1282A)	[Q21]	○	○
143	VS2SA1282−/−1	AC		B	Transistor (2SA1282A)	[Q22]	○	○
144	VSDSC001−//−1	AA		B	Transistor (DSC001)	[Q23]	○	○
145	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R1]	○	○
146	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R2]	○	○
147	VRD−RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R3]	○	○
148	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R4]	○	○
149	VRD−RC2EY222J	AA		C	Resistor (1/4W 2.2KΩ ±5%)	[R5]	○	○
150	VRD−RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R6]	○	○
151	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R7]	○	○
152	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R8]	○	○
153	VRD−RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R9]	○	○
154	VRD−RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R10]	○	○
155	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R11]	○	○
156	VRD−RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R12]	○	○
157	VRD−RC2EY122J	AA		C	Resistor (1/4W 1.2KΩ ±5%)	[R13]	○	○
158	VRD−RC2EY362J	AA		C	Resistor (1/4W 3.6KΩ ±5%)	[R14]	○	○
159	VRD−RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R15]	○	○
160	VRD−RC2EY121J	AA		C	Resistor (1/4W 120Ω ±5%)	[R16]	○	○
161	VRD−RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R17]	○	○
162	VRD−RC2EY122J	AA		C	Resistor (1/4W 1.2KΩ ±5%)	[R18]	○	○
163	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R19]	○	○
164	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R20]	○	○
165	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R22]	○	○
166	VRD−RC2EY361J	AA		C	Resistor (1/4W 360Ω ±5%)	[R23]	○	○
167	VRD−RC2EY821J	AA		C	Resistor (1/4W 820Ω ±5%)	[R24]	○	○
168	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R25]	○	○
169	VRD−RC2EY220J	AA		C	Resistor (1/4W 22Ω ±5%)	[R26]	○	○
170	VRS−HT3AA220J	AA		C	Resistor (1W 22Ω ±5%)	[R27]	○	○
171	VRS−HT3AA220J	AA		C	Resistor (1W 22Ω ±5%)	[R28]	○	○
172	VRS−HT3AA220J	AA		C	Resistor (1W 22Ω ±5%)	[R29]	○	○
173	VRD−RC2EY222J	AA		C	Resistor (1/4W 2.2KΩ ±5%)	[R31]	○	○
174	VRD−RC2EY752J	AA		C	Resistor (1/4W 7.5KΩ ±5%)	[R32]	○	○
175	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R33]	○	○
176	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R34]	○	○
177	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R35]	○	○
178	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R36]	○	○
179	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R37]	○	○
180	VRD−RC2EY104J	AA		C	Resistor (1/4W 100KΩ ±5%)	[R38]	○	○
181	VRD−RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R39]	○	○
182	VRD−RC2EY104J	AA		C	Resistor (1/4W 100KΩ ±5%)	[R40]	○	○
183	VRS−HT3DA151J	AA		C	Resistor (2W 150Ω ±5%)	[R42]	○	○
184	VRD−RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R43]	○	○
185	VRD−RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R44]	○	○
186	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R45]	○	○
187	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R46]	○	○
188	VRD−RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R47]	○	○
189	VRS−HT3DA151J	AA		C	Resistor (2W 150Ω ±5%)	[R48]	○	○
190	VRS−HT3DA152J	AA	N	C	Resistor (2W 1.5KΩ ±5%)	[R49]	○	○
191	VRD−RC2EY471J	AA		C	Resistor (1/4W 470Ω ±5%)	[R50]	○	○
192	VRD−RC2EY221J	AA		C	Resistor (1/4W 220Ω ±5%)	[R51]	○	○
193	VRS−HT3DA151J	AA		C	Resistor (2W 150Ω ±5%)	[R52]	○	○

6 Unit,Main control PWB

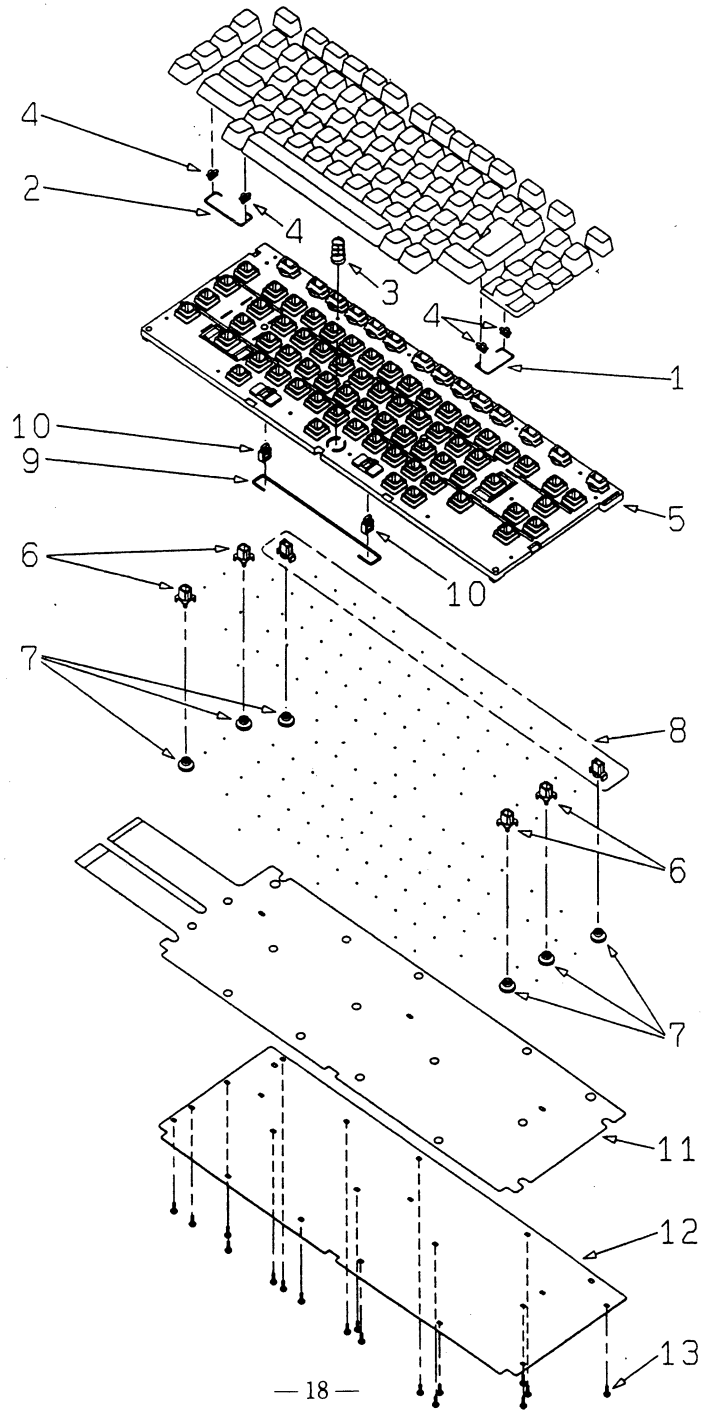
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION		PAW 1400	PAW 1410
194	VRD-RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R53]	○	○
195	VRD-RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R54]	○	○
196	VRD-RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R55]	○	○
197	VRD-RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R56]	○	○
198	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R57]	○	○
199	VRS-HT3DA151J	AA		C	Resistor (2W 150Ω ±5%)	[R58]	○	○
200	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R59]	○	○
201	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R60]	○	○
202	VRD-RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R61]	○	○
203	VRD-RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R62]	○	○
204	VRD-RC2EY472J	AA		C	Resistor (1/4W 4.7KΩ ±5%)	[R63]	○	○
205	VRD-RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R64]	○	○
206	VRD-RC2EY104J	AA		C	Resistor (1/4W 100KΩ ±5%)	[R65]	○	○
207	VRD-RC2EY104J	AA		C	Resistor (1/4W 100KΩ ±5%)	[R66]	○	○
208	VRD-RC2EY331G	AA	N	C	Resistor (1/4W 330Ω ±2%)	[R67]	○	○
209	VRD-RC2EY105J	AA		C	Resistor (1/4W 1.0MΩ ±5%)	[R68]	○	○
210	VRD-RC2EY222G	AA		C	Resistor (1/4W 2.2KΩ ±2%)	[R69]	○	○
211	VRD-RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R70]	○	○
212	VRD-RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R71]	○	○
213	VRD-RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R72]	○	○
214	VRD-RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R73]	○	○
215	VRD-RC2EY473J	AA		C	Resistor (1/4W 47KΩ ±5%)	[R74]	○	○
216	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R75]	○	○
217	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R76]	○	○
218	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R77]	○	○
219	VRD-RC2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%)	[R79]	○	○
220	VRD-RC2EY204J	AA		C	Resistor (1/4W 200KΩ ±5%)	[R80]	○	○
221	VRD-RC2EY273J	AA		C	Resistor (1/4W 27KΩ ±5%)	[R81]	○	○
222	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%)	[R82]	○	○
223	VRD-RC2EY331G	AA	N	C	Resistor (1/4W 330Ω ±2%)	[R83]	○	○
224	RMPTC8104QCKB	AD		B	Block resistor (100KΩ×8 1/8W ±10%)	[RA1]	○	○
225	RMPTC8103QCKB	AD		B	Block resistor (10KΩ×8 1/8W ±10%)	[RA2]	○	○
226	RMPTC4103QCKB	AC		B	Block resistor (10KΩ×4 1/8W ±10%)	[RA3]	○	○
227	RMPTC8103QCKB	AD		B	Block resistor (10KΩ×8 1/8W ±10%)	[RA4]	○	○
228	RMPTC4103QCKB	AC		B	Block resistor (10KΩ×4 1/8W ±10%)	[RA5]	○	○
229	RMPTC4103QCKB	AC		B	Block resistor (10KΩ×4 1/8W ±10%)	[RA6]	○	○
230	RCRSQ5025SCZZ	AG	N	B	Crystal (32MHz)	[X1]	○	○
231	RCRMZ5002BCZA	AD		B	Crystal (8MHZ)	[X2]	○	○
232	RCRSQ5025SCZZ	AG	N	B	Crystal (32MHz)	[X3]	○	○
233	VHEHZ30L3//-1	AA	N	B	Zener diode (HZ30L3)	[ZD1]	○	○
234	VHEHZ4C2///-1	AB		B	Zener diode (HZ4C2)	[ZD2]	○	○
235	VHEHZ15-2///-1	AB		B	Zener diode (HZ15-2)	[ZD3]	○	○
236	VHEHZ15-2//-1	AB		B	Zener diode (HZ15-2)	[ZD4]	○	○
237	VHEHZ15-2//-1	AB		B	Zener diode (HZ15-2)	[ZD5]	○	○
238	VHEHZ15-2//-1	AB		B	Zener diode (HZ15-2)	[ZD6]	○	○
239	VHEHZ7A3///-1	AB		B	Zener diode (HZ7A3)	[ZD7]	○	○
240	PRDAF5026CHZZ	AR	N	C	Heat sink		○	○
241	QFSHA1002CCZZ	AB		C	Holder,fuse (SN-3E)(for F1)		○	○
242	RCORF5014BCZZ	AB	N	B	Core (T-314)(for X1)		○	○
243	QSOCZ6432ACZZ	AL		C	IC socket,32pin (for IC12)(Type-A,B,C)		○	○
244	XHPSD30P08000	AA		C	Screw (3×8)(for Heat sink)		○	○
245	QSOCZ6440ACZZ	AG		C	IC socket (40pin)(for IC13)		○	○
246	VHiLH534G2L-1	AX	N	B	IC (LH534G2L)(Type-A,B,C)	[IC13]	○	○
247	VHiLH534G6B-1	AX	N	B	IC (LH534G6B)(Type-D)	[IC13]		○
248	VHiLH534G6L-1	AX	N	B	IC (LH534G6L)(Type-E)	[IC13]		○
249	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF)	[C52-1]	○	○
	(Unit)							
901	CPWBF5186CH01	BY	N	E	Unit,Main control PWB (Type-A)	(Ref.destination table)	○	○
	CPWBF5186CH06	CC	N	E	Unit,Main control PWB (Type-B)	(Ref.destination table)		○
	CPWBF5186CH07	CB	N	E	Unit,Main control PWB (Type-C)	(Ref.destination table)		○
	CPWBF5186HH02	BZ	N	E	Unit,main control PWB (Type-D)	(Ref.destination table)		○
	CPWBF5186HH03	BZ	N	E	Unit,main control PWB (Type-E)	(Ref.destination table)		○

8 Unit,Carrier PWB

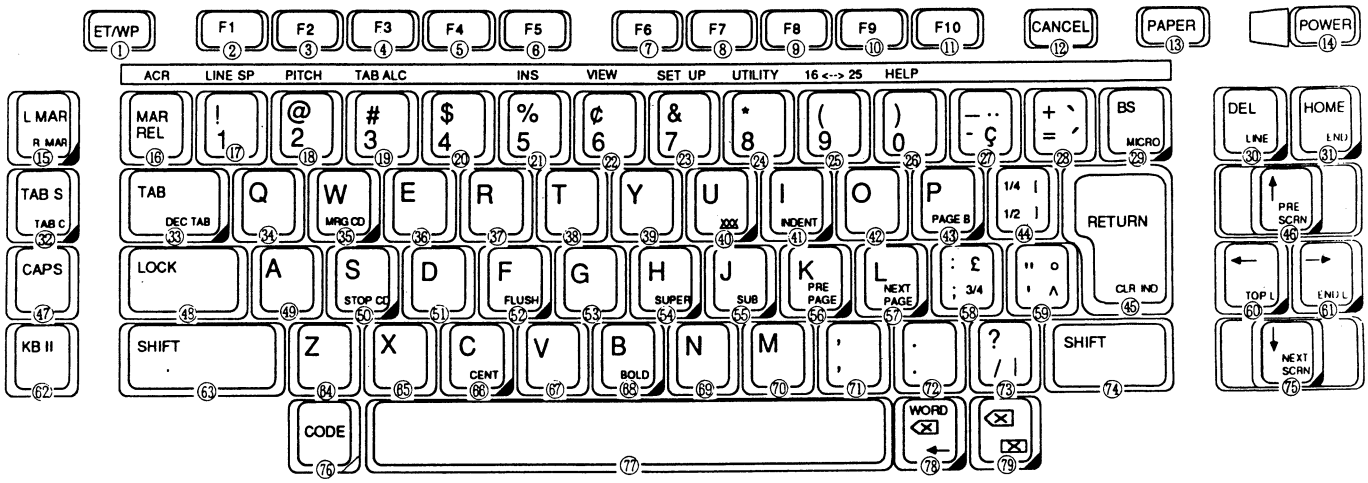
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION		PAW 1400	PAW 1410
1	QCNCM1319CC0F	AC		C	Connector (6pin)	[CN1]	○	○
2	QCNCM1338CC0B	AA		B	Connector (2pin)	[CN2]	○	○
3	QCNCM1319CC0F	AC		C	Connector (6pin)	[CN3]	○	○
4	QCNW-5279BCZA	AF	N	C	Cable,carrier (Except Europe)		○	○
	QCNW-5279HHZA	AS		C	Cable,carrier (For Europe)			○
5	QCNW-5298CHZZ	AB	N	C	Cable, CR earth (Except Europe)		○	○
	QCNW-5298HHZZ	AE		C	Cable,CR earth (For Europe)			○
6	VRD-RC2EY105J	AA		C	Resistor (1/4W 1MΩ ±5%)		○	○
	(Unit)							
901	CPWBF5185CH01	AN	N	E	Unit,carrier PWB (Except Europe)		○	○
901	CPWBF5185HH01	AS		E	Unit,carrier PWB (For Europe)			○

9 Unit,keyboard(For the key top,refer to the description on the key top)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION	PAW 1400	PAW 1410
1	0EN8210-0015/	AB		C	Stabilizer(2U)	○	○
2	0EN8210-0020/	AB		C	Stabilizer(3U)	○	○
3	0EN8210-0004/	AA		C	Coil Spring	○	○
4	0EN8330-0021/	AA		C	Stabilizer guide	○	○
5	0EN8370-0182/	AR	N	C	Keyboard frame	○	○
6	0EN8350-0234/	AA		C	Key Stem	○	○
7	0EN8330-0047/	AA	N	C	Rubber spring	○	○
8	0EN8350-0285/	AA	N	C	Key stem half	○	○
9	0EN8210-0009/	AC		C	Stabilizer(7U)	○	○
10	0EN8330-0024/	AA		C	Space Bar Guide	○	○
11	0EN8770-0013/	AW	N	C	Full membrane sheet	○	○
12	0EN8250-0019/	AR	N	C	Back plate	○	○
13	0EN1012-0951/	AA		C	PTP screw (M2.6×6)	○	○
	(Unit)						
901	DUNTK6769BCZZ	BB	N	E	Unit,keyboard (Type-A) (Ref.destination table)	○	○
	DUNTK6788BCZZ	BF	N	E	Unit,keyboard (Type-B) (Ref.destination table)		○
	DUNTK6795HHZZ	BC	N	E	Unit,keyboard (Type-C) (Ref.destination table)		○
	DUNTK6798HHZZ	BC	N	E	Unit,keyboard (Type-D) (Ref.destination table)		○
	DUNTK6796HHZZ	BC	N	E	Unit,keyboard (Type-E) (Ref.destination table)		○



10 Key top : Type-A

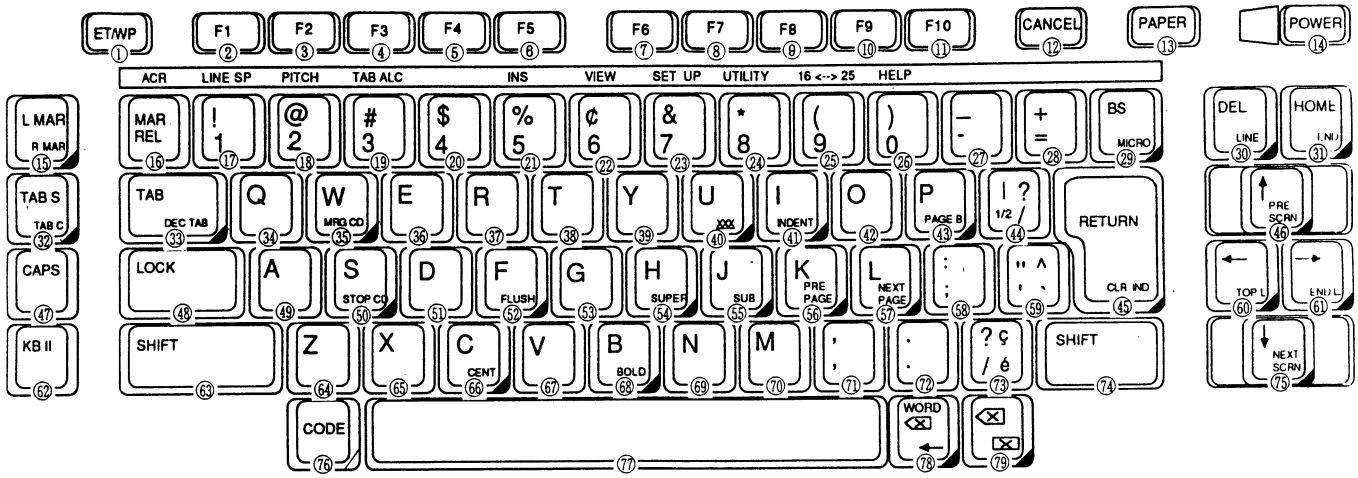


NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
1	0EN840C1-001/	A C	D D	N	C	Key top
2	0EN840C1-002/	A C	D D	N	C	Key top
3	0EN840C1-003/	A C	D D	N	C	Key top
4	0EN840C1-004/	A C	D D	N	C	Key top
5	0EN840C1-005/	A C	D D	N	C	Key top
6	0EN840C1-006/	A C	D D	N	C	Key top
7	0EN840C1-007/	A C	D D	N	C	Key top
8	0EN840C1-008/	A C	D D	N	C	Key top
9	0EN840C1-009/	A C	D D	N	C	Key top
10	0EN840C1-010/	A C	D D	N	C	Key top
11	0EN840C1-011/	A C	D D	N	C	Key top
12	0EN840C1-012/	A C	D D	N	C	Key top
13	0EN840C1-013/	A C	D D	N	C	Key top
14	0EN840C1-014/	A C	D D	N	C	Key top
15	0EN840C1-015/	A D	D F	N	C	Key top
16	0EN840C1-016/	A C	D D	N	C	Key top
17	0EN840C1-017/	A C	D D	N	C	Key top
18	0EN840C1-018/	A C	D D	N	C	Key top
19	0EN840C1-019/	A C	D D	N	C	Key top
20	0EN840C1-020/	A C	D D	N	C	Key top
21	0EN840C1-021/	A C	D D	N	C	Key top
22	0EN840C1-022/	A C	D D	N	C	Key top
23	0EN840C1-023/	A C	D D	N	C	Key top
24	0EN840C1-024/	A C	D D	N	C	Key top
25	0EN840C1-025/	A C	D D	N	C	Key top
26	0EN840C1-026/	A C	D D	N	C	Key top
27	0EN840C1-027/	A C	D D	N	C	Key top
28	0EN840C1-028/	A C	D D	N	C	Key top
29	0EN840C1-029/	A D	D F	N	C	Key top
30	0EN840C1-030/	A D	D F	N	C	Key top
31	0EN840C1-031/	A D	D F	N	C	Key top
32	0EN840C1-032/	A D	D F	N	C	Key top
33	0EN840C1-033/	A E	D H	N	C	Key top
34	0EN840C1-034/	A C	D D	N	C	Key top
35	0EN840C1-035/	A D	D F	N	C	Key top
36	0EN840C1-036/	A C	D D	N	C	Key top
37	0EN840C1-037/	A C	D D	N	C	Key top
38	0EN840C1-038/	A C	D D	N	C	Key top
39	0EN840C1-039/	A C	D D	N	C	Key top
40	0EN840C1-040/	A D	D F	N	C	Key top
41	0EN840C1-041/	A D	D F	N	C	Key top
42	0EN840C1-042/	A C	D D	N	C	Key top
43	0EN840C1-043/	A D	D F	N	C	Key top
44	0EN840C1-044/	A C	D D	N	C	Key top
45	0EN840C1-045/	A G	D R	N	C	Key top
46	0EN840C1-046/	A E	D H	N	C	Key top
47	0EN840C1-047/	A C	D D	N	C	Key top
48	0EN840C1-048/	A D	D G	N	C	Key top
49	0EN840C1-049/	A C	D D	N	C	Key top
50	0EN840C1-050/	A D	D F	N	C	Key top

	BASE	LEGEND
	GRAY 3	GRAY 8
	GRAY 3	GRAY 8 / GREEN 21
	GRAY 3	GREEN 21

NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
51	0EN840C1-051/	A C	D D	N	C	Key top
52	0EN840C1-052/	A D	D F	N	C	Key top
53	0EN840C1-053/	A C	D D	N	C	Key top
54	0EN840C1-054/	A D	D F	N	C	Key top
55	0EN840C1-055/	A D	D F	N	C	Key top
56	0EN840C1-056/	A D	D F	N	C	Key top
57	0EN840C1-057/	A D	D F	N	C	Key top
58	0EN840C1-058/	A C	D D	N	C	Key top
59	0EN840C1-059/	A C	D D	N	C	Key top
60	0EN840C1-060/	A D	D F	N	C	Key top
61	0EN840C1-061/	A D	D F	N	C	Key top
62	0EN840C1-062/	A C	D D	N	C	Key top
63	0EN840C1-063/	A D	D G	N	C	Key top
64	0EN840C1-064/	A C	D D	N	C	Key top
65	0EN840C1-065/	A C	D D	N	C	Key top
66	0EN840C1-066/	A D	D F	N	C	Key top
67	0EN840C1-067/	A C	D D	N	C	Key top
68	0EN840C1-068/	A D	D F	N	C	Key top
69	0EN840C1-069/	A C	D D	N	C	Key top
70	0EN840C1-070/	A C	D D	N	C	Key top
71	0EN840C1-071/	A C	D D	N	C	Key top
72	0EN840C1-072/	A C	D D	N	C	Key top
73	0EN840C1-073/	A C	D D	N	C	Key top
74	0EN840C1-074/	A D	D G	N	C	Key top
75	0EN840C1-075/	A E	D H	N	C	Key top
76	0EN840C1-076/	A C	D D	N	C	Key top
77	0EN840C1-077/	A E	D K	N	C	Key top
78	0EN840C1-078/	A D	D F	N	C	Key top
79	0EN840C1-079/	A D	D F	N	C	Key top

11 Key top : Type-B

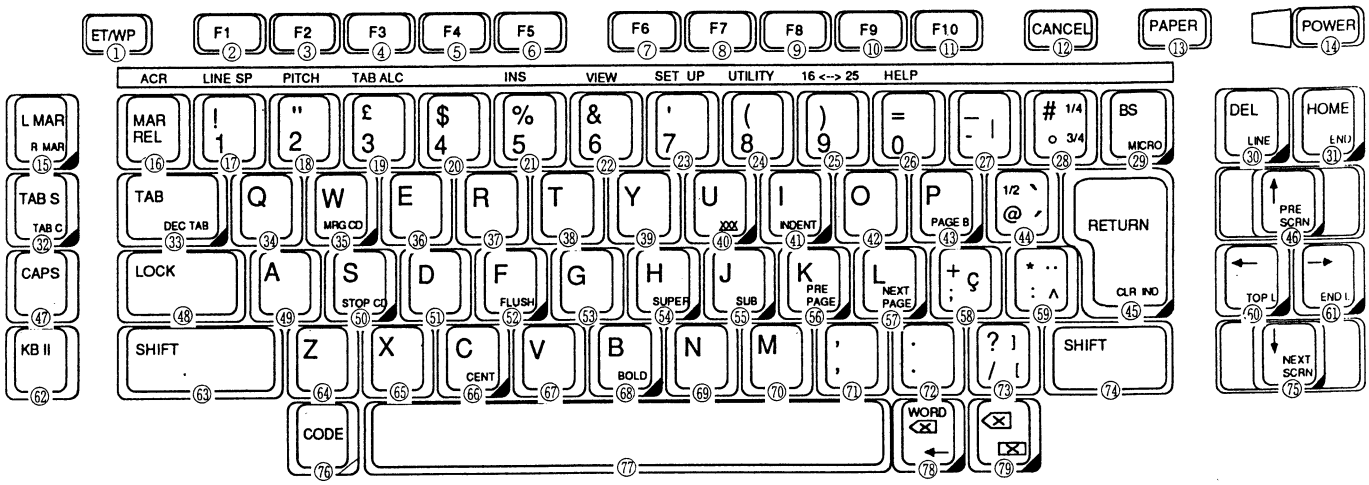


NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
1	0EN842C1-001/	A C	D D	N	C	Key top
2	0EN842C1-002/	A C	D D	N	C	Key top
3	0EN842C1-003/	A C	D D	N	C	Key top
4	0EN842C1-004/	A C	D D	N	C	Key top
5	0EN842C1-005/	A C	D D	N	C	Key top
6	0EN842C1-006/	A C	D D	N	C	Key top
7	0EN842C1-007/	A C	D D	N	C	Key top
8	0EN842C1-008/	A C	D D	N	C	Key top
9	0EN842C1-009/	A C	D D	N	C	Key top
10	0EN842C1-010/	A C	D D	N	C	Key top
11	0EN842C1-011/	A C	D D	N	C	Key top
12	0EN842C1-012/	A C	D D	N	C	Key top
13	0EN842C1-013/	A C	D D	N	C	Key top
14	0EN842C1-014/	A C	D D	N	C	Key top
15	0EN842C1-015/	A D	D F	N	C	Key top
16	0EN842C1-016/	A C	D D	N	C	Key top
17	0EN842C1-017/	A C	D D	N	C	Key top
18	0EN842C1-018/	A C	D D	N	C	Key top
19	0EN842C1-019/	A C	D D	N	C	Key top
20	0EN842C1-020/	A C	D D	N	C	Key top
21	0EN842C1-021/	A C	D D	N	C	Key top
22	0EN842C1-022/	A C	D D	N	C	Key top
23	0EN842C1-023/	A C	D D	N	C	Key top
24	0EN842C1-024/	A C	D D	N	C	Key top
25	0EN842C1-025/	A C	D D	N	C	Key top
26	0EN842C1-026/	A C	D D	N	C	Key top
27	0EN842C1-027/	A C	D D	N	C	Key top
28	0EN842C1-028/	A C	D D	N	C	Key top
29	0EN842C1-029/	A D	D F	N	C	Key top
30	0EN842C1-030/	A D	D F	N	C	Key top
31	0EN842C1-031/	A D	D F	N	C	Key top
32	0EN842C1-032/	A D	D F	N	C	Key top
33	0EN842C1-033/	A E	D H	N	C	Key top
34	0EN842C1-034/	A C	D D	N	C	Key top
35	0EN842C1-035/	A D	D F	N	C	Key top
36	0EN842C1-036/	A C	D D	N	C	Key top
37	0EN842C1-037/	A C	D D	N	C	Key top
38	0EN842C1-038/	A C	D D	N	C	Key top
39	0EN842C1-039/	A C	D D	N	C	Key top
40	0EN842C1-040/	A D	D F	N	C	Key top
41	0EN842C1-041/	A D	D F	N	C	Key top
42	0EN842C1-042/	A C	D D	N	C	Key top
43	0EN842C1-043/	A D	D F	N	C	Key top
44	0EN842C1-044/	A C	D D	N	C	Key top
45	0EN842C1-045/	A G	D R	N	C	Key top
46	0EN842C1-046/	A E	D H	N	C	Key top
47	0EN842C1-047/	A C	D D	N	C	Key top
48	0EN842C1-048/	A D	D G	N	C	Key top
49	0EN842C1-049/	A C	D D	N	C	Key top
50	0EN842C1-050/	A D	D F	N	C	Key top

	BASE	LEGEND
	GRAY 3	GRAY 8
	GRAY 3	GRAY 8 / GREEN 21
	GRAY 3	GREEN 21

NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
51	0EN842C1-051/	A C	D D	N	C	Key top
52	0EN842C1-052/	A D	D F	N	C	Key top
53	0EN842C1-053/	A C	D D	N	C	Key top
54	0EN842C1-054/	A D	D F	N	C	Key top
55	0EN842C1-055/	A D	D F	N	C	Key top
56	0EN842C1-056/	A D	D F	N	C	Key top
57	0EN842C1-057/	A D	D F	N	C	Key top
58	0EN842C1-058/	A C	D D	N	C	Key top
59	0EN842C1-059/	A C	D D	N	C	Key top
60	0EN842C1-060/	A D	D F	N	C	Key top
61	0EN842C1-061/	A D	D F	N	C	Key top
62	0EN842C1-062/	A C	D D	N	C	Key top
63	0EN842C1-063/	A D	D G	N	C	Key top
64	0EN842C1-064/	A C	D D	N	C	Key top
65	0EN842C1-065/	A C	D D	N	C	Key top
66	0EN842C1-066/	A D	D F	N	C	Key top
67	0EN842C1-067/	A C	D D	N	C	Key top
68	0EN842C1-068/	A D	D F	N	C	Key top
69	0EN842C1-069/	A C	D D	N	C	Key top
70	0EN842C1-070/	A C	D D	N	C	Key top
71	0EN842C1-071/	A C	D D	N	C	Key top
72	0EN842C1-072/	A C	D D	N	C	Key top
73	0EN842C1-073/	A C	D D	N	C	Key top
74	0EN842C1-074/	A D	D G	N	C	Key top
75	0EN842C1-075/	A E	D H	N	C	Key top
76	0EN842C1-076/	A C	D D	N	C	Key top
77	0EN842C1-077/	A E	D K	N	C	Key top
78	0EN842C1-078/	A D	D F	N	C	Key top
79	0EN842C1-079/	A D	D F	N	C	Key top

12 Key top : Type-C

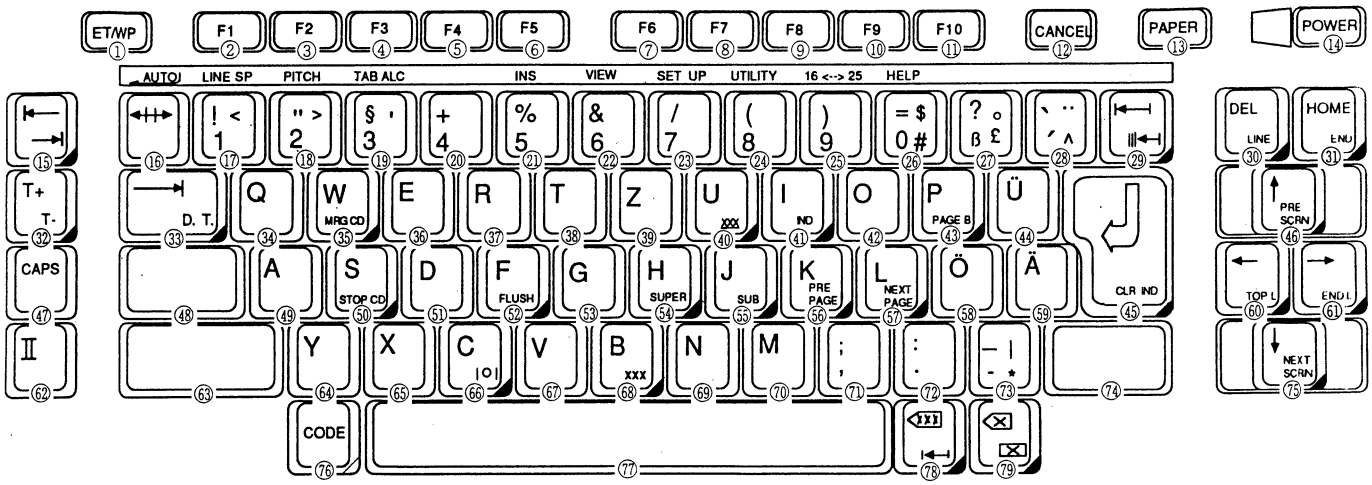


NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
1	0EN841C1-001/	AC	DD	N	C	Key top
2	0EN841C1-002/	AC	DD	N	C	Key top
3	0EN841C1-003/	AC	DD	N	C	Key top
4	0EN841C1-004/	AC	DD	N	C	Key top
5	0EN841C1-005/	AC	DD	N	C	Key top
6	0EN841C1-006/	AC	DD	N	C	Key top
7	0EN841C1-007/	AC	DD	N	C	Key top
8	0EN841C1-008/	AC	DD	N	C	Key top
9	0EN841C1-009/	AC	DD	N	C	Key top
10	0EN841C1-010/	AC	DD	N	C	Key top
11	0EN841C1-011/	AC	DD	N	C	Key top
12	0EN841C1-012/	AC	DD	N	C	Key top
13	0EN841C1-013/	AC	DD	N	C	Key top
14	0EN841C1-014/	AC	DD	N	C	Key top
15	0EN841C1-015/	AD	DF	N	C	Key top
16	0EN841C1-016/	AC	DD	N	C	Key top
17	0EN841C1-017/	AC	DD	N	C	Key top
18	0EN841C1-018/	AC	DD	N	C	Key top
19	0EN841C1-019/	AC	DD	N	C	Key top
20	0EN841C1-020/	AC	DD	N	C	Key top
21	0EN841C1-021/	AC	DD	N	C	Key top
22	0EN841C1-022/	AC	DD	N	C	Key top
23	0EN841C1-023/	AC	DD	N	C	Key top
24	0EN841C1-024/	AC	DD	N	C	Key top
25	0EN841C1-025/	AC	DD	N	C	Key top
26	0EN841C1-026/	AC	DD	N	C	Key top
27	0EN841C1-027/	AC	DD	N	C	Key top
28	0EN841C1-028/	AC	DD	N	C	Key top
29	0EN841C1-029/	AD	DF	N	C	Key top
30	0EN841C1-030/	AD	DF	N	C	Key top
31	0EN841C1-031/	AD	DF	N	C	Key top
32	0EN841C1-032/	AD	DF	N	C	Key top
33	0EN841C1-033/	AE	DH	N	C	Key top
34	0EN841C1-034/	AC	DD	N	C	Key top
35	0EN841C1-035/	AD	DF	N	C	Key top
36	0EN841C1-036/	AC	DD	N	C	Key top
37	0EN841C1-037/	AC	DD	N	C	Key top
38	0EN841C1-038/	AC	DD	N	C	Key top
39	0EN841C1-039/	AC	DD	N	C	Key top
40	0EN841C1-040/	AD	DF	N	C	Key top
41	0EN841C1-041/	AD	DF	N	C	Key top
42	0EN841C1-042/	AC	DD	N	C	Key top
43	0EN841C1-043/	AD	DF	N	C	Key top
44	0EN841C1-044/	AC	DD	N	C	Key top
45	0EN841C1-045/	AG	DR	N	C	Key top
46	0EN841C1-046/	AE	DH	N	C	Key top
47	0EN841C1-047/	AC	DD	N	C	Key top
48	0EN841C1-048/	AD	DG	N	C	Key top
49	0EN841C1-049/	AC	DD	N	C	Key top
50	0EN841C1-050/	AD	DF	N	C	Key top

	BASE	LEGEND
	GRAY 3	GRAY 8
	GRAY 3	GRAY 8 / GREEN 21
	GRAY 3	GREEN 21

NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
51	0EN841C1-051/	AC	DD	N	C	Key top
52	0EN841C1-052/	AD	DF	N	C	Key top
53	0EN841C1-053/	AC	DD	N	C	Key top
54	0EN841C1-054/	AD	DF	N	C	Key top
55	0EN841C1-055/	AD	DF	N	C	Key top
56	0EN841C1-056/	AD	DF	N	C	Key top
57	0EN841C1-057/	AD	DF	N	C	Key top
58	0EN841C1-058/	AC	DD	N	C	Key top
59	0EN841C1-059/	AC	DD	N	C	Key top
60	0EN841C1-060/	AD	DF	N	C	Key top
61	0EN841C1-061/	AD	DF	N	C	Key top
62	0EN841C1-062/	AC	DD	N	C	Key top
63	0EN841C1-063/	AD	DG	N	C	Key top
64	0EN841C1-064/	AC	DD	N	C	Key top
65	0EN841C1-065/	AC	DD	N	C	Key top
66	0EN841C1-066/	AD	DF	N	C	Key top
67	0EN841C1-067/	AC	DD	N	C	Key top
68	0EN841C1-068/	AD	DF	N	C	Key top
69	0EN841C1-069/	AC	DD	N	C	Key top
70	0EN841C1-070/	AC	DD	N	C	Key top
71	0EN841C1-071/	AC	DD	N	C	Key top
72	0EN841C1-072/	AC	DD	N	C	Key top
73	0EN841C1-073/	AC	DD	N	C	Key top
74	0EN841C1-074/	AD	DG	N	C	Key top
75	0EN841C1-075/	AE	DH	N	C	Key top
76	0EN841C1-076/	AC	DD	N	C	Key top
77	0EN841C1-077/	AE	DK	N	C	Key top
78	0EN841C1-078/	AD	DF	N	C	Key top
79	0EN841C1-079/	AD	DF	N	C	Key top

13 Key top : Type-D



NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
1	0EN840F4-001/	AC	DD	N	C	Key top キートップ
2	0EN840F4-002/	AC	DD	N	C	Key top キートップ
3	0EN840F4-003/	AC	DD	N	C	Key top キートップ
4	0EN840F4-004/	AC	DD	N	C	Key top キートップ
5	0EN840F4-005/	AC	DD	N	C	Key top キートップ
6	0EN840F4-006/	AC	DD	N	C	Key top キートップ
7	0EN840F4-007/	AC	DD	N	C	Key top キートップ
8	0EN840F4-008/	AC	DD	N	C	Key top キートップ
9	0EN840F4-009/	AC	DD	N	C	Key top キートップ
10	0EN840F4-010/	AC	DD	N	C	Key top キートップ
11	0EN840F4-011/	AC	DD	N	C	Key top キートップ
12	0EN840F4-012/	AC	DD	N	C	Key top キートップ
13	0EN840F4-013/	AC	DD	N	C	Key top キートップ
14	0EN840F4-014/	AC	DD	N	C	Key top キートップ
15	0EN840F4-015/	AD	DF	N	C	Key top キートップ
16	0EN840F4-016/	AC	DD	N	C	Key top キートップ
17	0EN840F4-017/	AC	DD	N	C	Key top キートップ
18	0EN840F4-018/	AC	DD	N	C	Key top キートップ
19	0EN840F4-019/	AC	DD	N	C	Key top キートップ
20	0EN840F4-020/	AC	DD	N	C	Key top キートップ
21	0EN840F4-021/	AC	DD	N	C	Key top キートップ
22	0EN840F4-022/	AC	DD	N	C	Key top キートップ
23	0EN840F4-023/	AC	DD	N	C	Key top キートップ
24	0EN840F4-024/	AC	DD	N	C	Key top キートップ
25	0EN840F4-025/	AC	DD	N	C	Key top キートップ
26	0EN840F4-026/	AC	DD	N	C	Key top キートップ
27	0EN840F4-027/	AC	DD	N	C	Key top キートップ
28	0EN840F4-028/	AC	DD	N	C	Key top キートップ
29	0EN840F4-029/	AD	DF	N	C	Key top キートップ
30	0EN840F4-030/	AD	DF	N	C	Key top キートップ
31	0EN840F4-031/	AD	DF	N	C	Key top キートップ
32	0EN840F4-032/	AD	DF	N	C	Key top キートップ
33	0EN840F4-033/	AE	DH	N	C	Key top キートップ
34	0EN840F4-034/	AC	DD	N	C	Key top キートップ
35	0EN840F4-035/	AD	DF	N	C	Key top キートップ
36	0EN840F4-036/	AC	DD	N	C	Key top キートップ
37	0EN840F4-037/	AC	DD	N	C	Key top キートップ
38	0EN840F4-038/	AC	DD	N	C	Key top キートップ
39	0EN840F4-039/	AC	DD	N	C	Key top キートップ
40	0EN840F4-040/	AD	DF	N	C	Key top キートップ
41	0EN840F4-041/	AD	DF	N	C	Key top キートップ
42	0EN840F4-042/	AC	DD	N	C	Key top キートップ
43	0EN840F4-043/	AD	DF	N	C	Key top キートップ
44	0EN840F4-044/	AC	DD	N	C	Key top キートップ
45	0EN840F4-045/	AG	DR	N	C	Key top キートップ
46	0EN840F4-046/	AE	DH	N	C	Key top キートップ
47	0EN840F4-047/	AC	DD	N	C	Key top キートップ
48	0EN840F4-048/	AD	DG	N	C	Key top キートップ
49	0EN840F4-049/	AC	DD	N	C	Key top キートップ
50	0EN840F4-050/	AD	DF	N	C	Key top キートップ

	BASE	LEGEND
	GRAY 3	GRAY 8
	GRAY 3	GRAY 8 / GREEN 21
	GRAY 3	GREEN 21

NO.	PARTS CODE	PRICE R. Ex.	PRICE R. Ja.	NEW	P/R	DESCRIPTION
51	0EN840F4-051/	AC	DD	N	C	Key top キートップ
52	0EN840F4-052/	AD	DF	N	C	Key top キートップ
53	0EN840F4-053/	AC	DD	N	C	Key top キートップ
54	0EN840F4-054/	AD	DF	N	C	Key top キートップ
55	0EN840F4-055/	AD	DF	N	C	Key top キートップ
56	0EN840F4-056/	AD	DF	N	C	Key top キートップ
57	0EN840F4-057/	AD	DF	N	C	Key top キートップ
58	0EN840F4-058/	AC	DD	N	C	Key top キートップ
59	0EN840F4-059/	AC	DD	N	C	Key top キートップ
60	0EN840F4-060/	AD	DF	N	C	Key top キートップ
61	0EN840F4-061/	AD	DF	N	C	Key top キートップ
62	0EN840F4-062/	AC	DD	N	C	Key top キートップ
63	0EN840F4-063/	AD	DG	N	C	Key top キートップ
64	0EN840F4-064/	AC	DD	N	C	Key top キートップ
65	0EN840F4-065/	AC	DD	N	C	Key top キートップ
66	0EN840F4-066/	AD	DF	N	C	Key top キートップ
67	0EN840F4-067/	AC	DD	N	C	Key top キートップ
68	0EN840F4-068/	AD	DF	N	C	Key top キートップ
69	0EN840F4-069/	AC	DD	N	C	Key top キートップ
70	0EN840F4-070/	AC	DD	N	C	Key top キートップ
71	0EN840F4-071/	AC	DD	N	C	Key top キートップ
72	0EN840F4-072/	AC	DD	N	C	Key top キートップ
73	0EN840F4-073/	AC	DD	N	C	Key top キートップ
74	0EN840F4-074/	AD	DG	N	C	Key top キートップ
75	0EN840F4-075/	AE	DH	N	C	Key top キートップ
76	0EN840F4-076/	AC	DD	N	C	Key top キートップ
77	0EN840F4-077/	AE	DK	N	C	Key top キートップ
78	0EN840F4-078/	AD	DF	N	C	Key top キートップ
79	0EN840F4-079/	AD	DF	N	C	Key top キートップ

■ Index

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
〔C〕					
CANGZ5183CH01	4- 30	AK		C	
CCABA5116CH04	1- 9	BB	N	D	
CCABA5116HH02	1- 9	AR	N	D	
CCABA5116HH05	1- 9	AR	N	D	
CCABD5118CH10	2- 501	CQ	N	E	
CCABD5118CH11	2- 501	CQ	N	E	
CCABD5118HH07	2- 501	BQ	N	E	
CCABD5118HH11	2- 501	BQ	N	E	
CCNW-5284CH01	2- 6	AC	N	C	
CDAiH5035CH04	3- 501	BP	N	E	
〃	4- 901	BP	N	E	
CDAiH5035HH03	3- 501	BR	N	E	
〃	4- 901	BR	N	E	
CGERH5107CH03	4- 23	AH	N	C	
CGERH5107HH03	4- 23	AG		C	
CGERH5110CH01	3- 19	AK		C	
CGERH5110HH01	3- 19	AQ		C	
CHLDX5078CH03	4- 19	AQ	N	C	
CHLDX5078HH03	4- 19	BA		C	
CHLDZ5052CH03	3- 18	AF	N	C	
CHLDZ5052HH03	3- 18	AF		C	
CMAGE5020CH01	4- 33	BA	N	B	
CMAGE5020HH01	4- 33	AZ	N	B	
CPAKC5916CH01	5- 14	BE	N	D	
CPAKC5917CH01	5- 14	BD	N	D	
CPAKC5929CH01	5- 14	BD	N	D	
CPLTM5110CH02	4- 34	AQ	N	C	
CPLTM5110HH04	4- 34	AZ		C	
CPWBF5185CH01	4- 38	AN	N	E	
〃	8- 901	AN	N	E	
CPWBF5185HH01	4- 38	AS		E	
〃	8- 901	AS		E	
CPWBF5186CH01	1- 28	BY	N	E	
〃	6- 901	BY	N	E	
CPWBF5186CH06	1- 28	CC	N	E	
〃	6- 901	CC	N	E	
CPWBF5186CH07	1- 28	CB	N	E	
〃	6- 901	CB	N	E	
CPWBF5186HH02	1- 28	BZ	N	E	
〃	6- 901	BZ	N	E	
CPWBF5186HH03	1- 28	BZ	N	E	
〃	6- 901	BZ	N	E	
〔D〕					
DUNTK6768BCZZ	1- 17	BS	N	E	
DUNTK6769BCZZ	9- 901	BB	N	E	
DUNTK6770CHZZ	1- 501	BC	N	E	
DUNTK6773BCZZ	2- 7	AZ	N	E	
DUNTK6788BCZZ	9- 901	BF	N	E	
DUNTK6790CHZZ	1- 501	BD	N	E	
DUNTK6790HHZA	1- 501	AY	N	E	
DUNTK6791CHZZ	1- 501	BD	N	E	
DUNTK6791HHZA	1- 501	AY	N	E	
DUNTK6795HHZZ	9- 901	BC	N	E	
DUNTK6796HHZZ	9- 901	BC	N	E	
DUNTK6798HHZZ	9- 901	BC	N	E	
〔G〕					
GCABB5117CHZD	1- 20	BB	N	D	
GCABB5117CHZE	1- 20	AZ	N	D	
GCABB5117CHZC	1- 20	AY	N	D	
GCABD5118CHZE	2- 12	AT	N	D	
GCABD5118CHZF	2- 12	AT	N	D	
GCABD5118CHZG	2- 12	AT	N	D	
GCABD5119CHZA	2- 1	AT	N	D	
GCABD5119CHZB	2- 1	AU	N	D	
GCASP5027CHZZ	5- 6	AG	N	D	
GiTAT5067CHZA	1- 2	AP	N	D	
GiTAT5067CHZZ	1- 2	AP	N	D	
GLEGG5001CHZZ	1- 19	AD	N	C	
〔H〕					
HDECP5046BCZA	2- 14	AV	N	D	
HDECP5046BCZB	2- 14	AV	N	D	
HDECP5046BCZZ	2- 14	AV	N	D	
〔J〕					
JHNDP5002CHZA	1- 21	AG	N	D	
JHNDP5002CHZZ	1- 21	AF	N	D	
JKNBZ5119CHZZ	4- 17	AC		C	
JKNBZ5120CHZZ	1- 8	AE		C	
JKNBZ5120HHZA	1- 8	AB		C	
JKNBZ5120HHZZ	1- 8	AB		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
JKNBZ5121CHZA	2- 13	AD	N	C	
JKNBZ5121CHZZ	2- 13	AD	N	C	
〔L〕					
LANGF5106CHZZ	3- 6	AE		C	
LANGF5106HHZZ	3- 6	AD		C	
LANGF5177CHZZ	4- 47	AE	N	C	
LANGG5175CHZZ	4- 45	AD	N	C	
LANGH5179CHZZ	1- 15	AH	N	C	
LANGT5178CHZZ	1- 16	AK	N	C	
LANGT5181CHZA	2- 2	AN	N	C	
LBNDJ0005FCZZ	1- 37	AB		C	
LBNDJ2003SCZZ	1- 26	AA		C	
〃	3- 24	AA		C	
〃	4- 50	AA		C	
LBNDJ5006HHZZ	1- 26	AA		C	
〃	3- 24	AA		C	
〃	4- 50	AA		C	
LDAiH5035CHZA	4- 41	AV	N	C	
LDAiH5035HHZA	4- 41	BG		C	
LFRM-5068CHZZ	3- 9	AG	N	C	
LFRM-5068HHZZ	3- 9	AD		C	
LHLDR5053CHZZ	3- 4	AL		C	
LHLDW0734FCZZ	1- 39	AA		C	
LHLDX5079HHZZ	4- 48	AB		C	
LHLDX5080HHZZ	4- 49	AB		C	
LHLDZ5051CHZA	4- 21	AG	N	C	
LHLDZ5051HHZA	4- 21	AD		C	
LHLDZ5076CHZZ	4- 1	AD	N	C	
LHLDZ5077CHZZ	4- 16	AD	N	C	
LPLTM5084BCZZ	4- 13	AB		C	
LPLTM5084HHZZ	4- 13	AB		C	
LPLTM5111CHZZ	1- 11	AH	N	C	
LPLTP5108CHZZ	3- 12	AC		C	
LPLTP5112BCZZ	2- 3	BA	N	C	
LSTPP5039CHZZ	4- 37	AD	N	C	
LSTPZ5032CHZZ	5- 2	AD		C	
LSTPZ5032HHZZ	5- 2	AC		C	
LX-BZ5058BCZZ	1-B01	AA		C	
〃	1-B02	AA		C	
〃	1-B03	AA		C	
〃	1-B04	AA		C	
LX-BZ5111CHZZ	4-B09	AA		C	
LX-BZ5111HHZZ	4-B09	AB		C	
LX-BZ5123BCZZ	4-B15	AA		C	
〃	4-B16	AA		C	
LX-BZ5127BCZZ	4-B13	AA		C	
〃	4-B14	AA		C	
LX-BZ5128BCZZ	4-B17	AA		C	
〃	4-B18	AA		C	
〔M〕					
MARMM5017CHZZ	1- 12	AK	N	C	
MCAMP5031CHZZ	4- 8	AD	N	C	
MCAMP5032CHZZ	4- 9	AD	N	C	
MLEVP5081CHZA	4- 26	AB		C	
MLEVP5092CHZB	3- 1	AE	N	C	
MLEVP5092CHZC	3- 1	AE	N	C	
MLEVP5100CHZA	4- 39	AE		C	
MSPRC5118BCZZ	4- 42	AA		C	
MSPRC5151CHZZ	4- 24	AA		C	
MSPRD5199CHZZ	4- 29	AE		C	
MSPRD5201CHZZ	4- 2	AB	N	C	
MSPRD5206CHZZ	4- 12	AB	N	C	
MSPRP5194CHZB	4- 46	AE	N	C	
MSPRP5203CHZZ	1- 13	AF	N	C	
MSPRP5204CHZZ	2- 11	AB	N	C	
MSPRP5205CHZZ	1- 4	AB	N	C	
MSPRT5150BCZZ	4- 25	AA		C	
MSPRT5156BCZZ	3- 7	AA		C	
MSPRT5180CHZZ	3- 17	AB		C	
MSPRT5202CHZZ	4- 5	AB	N	C	
MSPRT5207CHZZ	4- 35	AA	N	C	
MSPRT5208CHZZ	1- 33	AC	N	C	
〔N〕					
NBLTT5015BCZZ	3- 13	AE	N	B	
NBLTT5015HHZZ	3- 13	AF		B	
NBRGM5043CHZZ	4- 28	AA		C	
NGERH5108CHZZ	4- 27	AC		C	
NGERH5109CHZA	3- 20	AC		C	
NGERH5128CHZZ	3- 11	AD		C	
NGERH5129CHZZ	4- 15	AD	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
NGERH5130CHZZ	4- 11	AD	N	C	
NGERH5131CHZZ	4- 10	AD	N	C	
NGERH5132CHZZ	4- 4	AD	N	C	
NPLYB5033CHZZ	3- 15	AC		C	
NRŌLP5045CHZZ	4- 3	AA		C	
NRŌLR5050CHZZ	3- 3	AD		C	
NRŌLR5050HHZZ	3- 3	AB		C	
NRŌLR5051CHZZ	3- 2	AZ		C	
NRŌLR5051HHZZ	3- 2	AZ		C	
NSFTA5110CHZZ	3- 16	AC	N	C	
NSFTA5110HHZZ	3- 16	AC		C	
NSFTD5089CHZZ	3- 14	AP		C	
NSFTD5089HHZA	3- 14	AM		C	
NSFTD5104CHZZ	3- 8	AE		C	
NSFTD5104HHZZ	3- 8	AD		C	
NSFTP5114CHZZ	2- 10	AE	N	C	
NSFTZ5074CHZA	4- 31	AC		C	
NSFTZ5074HHZZ	4- 31	AA		C	
NSFTZ5108CHZZ	4- 44	AG	N	C	
NSFTZ5108HHZZ	4- 44	AF		C	
NSFTZ5113CHZA	1- 3	AK	N	C	
NSFTZ5113CHZZ	1- 3	AL	N	C	
【P】					
PAJS-5011CHZZ	4- 43	AD	N	C	
PCŌVP5077CHZZ	1- 27	AD		C	
PCŌVP5080CHZA	1- 5	AK	N	C	
PCŌVP5080CHZZ	1- 5	AL	N	C	
PCŌVP5081CHZA	1- 1	AY	N	D	
PCŌVP5081CHZZ	1- 1	AW	N	D	
PCŌVP5082CHZA	1- 14	AG	N	D	
PCŌVP5082CHZZ	1- 14	AF	N	D	
PCUSS5039CHZZ	1- 36	AB	N	C	
PCUSS5040CHZZ	1- 34	AE	N	C	
PCUSS5041CHZZ	1- 35	AE	N	C	
PGiDM5056CHZZ	3- 5	AF		C	
PGiDM5056HHZZ	3- 5	AE		C	
PGiDM5057CHZB	1- 7	AE	N	C	
PGiDM5057HHZB	1- 7	AF	N	C	
PGiDM5057HHZD	1- 7	AF	N	C	
PGiDM5061CHZZ	4- 22	AF	N	C	
PGUMS5045CHZA	2- 4	AF	N	C	
PGUMS5046CHZZ	2- 15	AC	N	C	
PGUMS5049BCZZ	2- 17	AE	N	C	
PRDAF5026CHZZ	6- 240	AR	N	C	
PSHEZ5071CHZZ	5- 16	AD		C	
PSHEZ5071HHZZ	5- 16	AA		C	
PSHEZ5073BCZZ	2- 9	AE	N	C	
PSLDM5024BCZZ	1- 32	AK	N	C	
PTME-5017CHZZ	4- 7	AC	N	C	
PTME-5018CHZZ	4- 6	AC	N	C	
PTME-5019CHZZ	4- 14	AD	N	C	
PTPEZ5023BCZZ	3- 25	AA		C	
【Q】					
QACCB7120JHN1	1- 31	AU		B	
QACCD1010DHN3	1- 31	AQ		B	
QACCE3120JHN3	1- 31	AN		B	
QACCE3120QCN3	1- 31	AM		B	
QACCF7121QCN1	1- 31	AW		B	
QACCZ1122QCZZ	1- 31	AH		B	
QACCZ7124QCN1	1- 31	AW		B	
QCNCM1319CC0F	6- 42	AC		C	
〃	6- 46	AC		C	
〃	8- 1	AC		C	
〃	8- 3	AC		C	
QCNCM1338CC0B	8- 2	AA		B	
QCNCM5043BCZZ	6- 44	AG		C	
QCNCM5091BC0i	6- 51	AD	N	C	
QCNCM5091BC1A	6- 50	AC		C	
QCNCM5128BC3D	6- 49	AE	N	C	
QCNCM6865RC0B	6- 45	AA		C	
〃	6- 48	AA		C	
QCNCM6932SC1B	6- 47	AC		C	
QCNCW5111BC1B	6- 43	AD		C	
QCNW-5264CHZZ	3- 22	AF		C	
QCNW-5264HHZZ	3- 22	AD		C	
QCNW-5279BCZA	8- 4	AF	N	C	
QCNW-5279HHZA	8- 4	AS		C	
QCNW-5281BCZZ	1- 18	AP	N	C	
QCNW-5282BCZZ	2- 5	AN	N	C	
QCNW-5298CHZZ	8- 5	AB	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
QCNW-5298HHZZ	8- 5	AE		C	
QCNW-5302HHZZ	3- 26	AB	N	C	
QFS-B0301QCZZ	6- 67	AE		A	
QFS-C1025CCZZ	6- 66	AF		B	
QFS-Z1005BCZZ	6- 68	AE	N	A	
QFSHA1002CCZZ	6- 241	AB		C	
QSŌCZ6432ACZZ	6- 243	AL		C	
QSŌCZ6440ACZZ	6- 245	AG		C	
QSW-F5045BCZZ	3- 21	AD		B	
QSW-Z2371RCZZ	6- 65	AG	N	B	
【R】					
RALMB5006SCZZ	6- 1	AD		B	
RC-KZ1003LCJZ	6- 117	AB	N	C	
RCiLZ5032BCZZ	6- 93	AH	N	C	
RCiLZ5033BCZZ	6- 92	AE	N	C	
RCŌRF1005LCZZ	2- 16	AG	N	C	
RCŌRF2023SCZZ	1- 38	AH		C	
RCŌRF5002BCZZ	6- 94	AB		B	
〃	6- 98	AB		B	
RCŌRF5011BCZZ	6- 95	AB	N	B	
〃	6- 96	AB	N	B	
RCŌRF5012BCZZ	6- 91	AB	N	B	
RCŌRF5013BCZZ	6- 97	AB	N	B	
〃	6- 99	AB	N	B	
〃	6- 100	AB	N	B	
〃	6- 101	AB	N	B	
〃	6- 102	AB	N	B	
〃	6- 103	AB	N	B	
〃	6- 104	AB	N	B	
〃	6- 105	AB	N	B	
〃	6- 106	AB	N	B	
〃	6- 107	AB	N	B	
〃	6- 108	AB	N	B	
〃	6- 109	AB	N	B	
〃	6- 110	AB	N	B	
〃	6- 111	AB	N	B	
〃	6- 112	AB	N	B	
〃	6- 113	AB	N	B	
〃	6- 114	AB	N	B	
〃	6- 115	AB	N	B	
〃	6- 116	AB	N	B	
RCŌRF5014BCZZ	6- 242	AB	N	B	
RCRMZ5002BCZA	6- 231	AD		B	
RCRSQ5025SCZZ	6- 230	AG	N	B	
〃	6- 232	AG	N	B	
RFiLN5001BCZZ	6- 82	AH	N	C	
RFiLN5002BCZZ	6- 83	AH	N	C	
〃	6- 84	AH	N	C	
〃	6- 85	AH	N	C	
〃	6- 86	AH	N	C	
〃	6- 87	AH	N	C	
〃	6- 88	AH	N	C	
〃	6- 89	AH	N	C	
〃	6- 90	AH	N	C	
〃	6- 118	AH	N	C	
〃	6- 119	AH	N	C	
〃	6- 120	AH	N	C	
〃	6- 121	AH	N	C	
〃	6- 122	AH	N	C	
RLMPD5001BCZZ	2- 8	AW	N	B	
RMŌTS5066BCZZ	4- 18	AS	N	B	
RMŌTS5066HHZZ	4- 18	AS		B	
RMŌTS5067BCZZ	4- 36	AS	N	B	
RMŌTS5067HHZZ	4- 36	AS		B	
RMŌTS5068BCZZ	3- 23	AS	N	B	
RMŌTS5068HHZZ	3- 23	AS		B	
RMŌTS5069BCZZ	3- 10	AS	N	B	
RMŌTS5069HHZZ	3- 10	AS		B	
RMPTC4103QCKB	6- 226	AC		B	
〃	6- 228	AC		B	
〃	6- 229	AC		B	
RMPTC8103QCKB	6- 225	AD		B	
〃	6- 227	AD		B	
RMPTC8104QCKB	6- 224	AD		B	
【S】					
SPAKA5915CHZZ	5- 15	AQ	N	D	
SPAKA5915HHZZ	5- 15	AF	N	D	
SPAKA5932HHZZ	5- 1	AA	N	D	
SPAKA5937CHZZ	5- 17	AE	N	D	
SPAKA5937HHZZ	5- 17	AA	N	D	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
SPAKA5938CHZZ	5- 1	AD	N	D	
SPAKC5929CHZZ	5- 14	BD	N	D	
SPAKC5933HHZZ	5- 14	AQ	N	D	
SPAKX5913CHZZ	5- 11	AP	N	D	
SPAKX5913HHZZ	5- 11	AK	N	D	
SPAKX5914CHZZ	5- 12	AP	N	D	
SPAKX5914HHZZ	5- 12	AK	N	D	
SSAKH0003DHZZ	5- 13	AE		D	
SSAKH0004DHZZ	5- 5	AB		D	
SSAKH0012UCZZ	5- 10	AB	N	D	
SSAKH5011HHZA	5- 10	AB		D	
//	5- 13	AB		D	
SSAKH5012HHZA	5- 5	AA		D	
【T】					
TCAUH5051BCZZ	1- 23	AA		C	
TCAUH5051HHZZ	1- 23	AA		C	
TCAUH5096HHZZ	5- 4	AK	N	C	
TGANE5021CHZZ	5- 9	AF	N	D	
TiNSE5586BCZZ	5- 7	AQ	N	D	
TiNSE5593CHZZ	5- 7	BB	N	D	
TiNSE5596HHZZ	5- 7	AX	N	D	
TiNSF5599HHZZ	5- 7	AX	N	D	
TiNSG5598HHZZ	5- 7	AX	N	D	
TiNSK5592BCZZ	5- 7	BB	N	D	
TLABH5174CHZZ	1- 24	AC		C	
TLABH5241CHZZ	1- 10	AH	N	C	
TLABH5241HHZA	1- 10	AH	N	C	
TLABH5241HHZZ	1- 10	AH	N	C	
TLABM5237CHZZ	5- 3	AG	N	C	
TLABM5238CHZZ	5- 3	AG	N	C	
TLABM5308HHZZ	5- 3	AA	N	C	
TLABZ5125CHZZ	5- 8	AB		C	
TLABZ5310CHZZ	2- 18	AA	N	C	
【V】					
VCCCPU1HH150J	6- 31	AA		C	
//	6- 32	AA		C	
VCCCPU1HH220J	6- 26	AA		C	
VCCCPU1HH330J	6- 25	AB		C	
VCEAGU1CW106M	6- 14	AA		C	
//	6- 19	AA		C	
//	6- 22	AA		C	
//	6- 27	AA		C	
//	6- 28	AA		C	
//	6- 29	AA		C	
//	6- 33	AA		C	
VCEAGU1CW107M	6- 30	AB		C	
VCEAGU1EW108M	6- 11	AD		C	
VCEAGU1EW476M	6- 12	AB		C	
VCEAGU1HW105M	6- 16	AA	N	C	
VCEAGU1HW108M	6- 2	AF		C	
//	6- 3	AF		C	
VCEAGU1JW476M	6- 7	AB	N	C	
VCKYPU1HB101K	6- 13	AA		C	
//	6- 36	AA		C	
//	6- 38	AA		C	
VCKYPU1HB102K	6- 10	AA		C	
//	6- 15	AA		C	
//	6- 17	AA		C	
//	6- 20	AA		C	
//	6- 35	AA		C	
VCKYPU1HB471K	6- 5	AA		C	
VCKYPU1HF223Z	6- 6	AA		C	
//	6- 18	AA		C	
//	6- 21	AA		C	
//	6- 23	AA		C	
//	6- 34	AA		C	
//	6- 37	AA		C	
//	6- 39	AA		C	
//	6- 40	AA		C	
//	6- 41	AA		C	
//	6- 249	AA		C	
VCKYPU1HF473Z	6- 4	AB		C	
VCQYNU1HM103K	6- 8	AA		C	
//	6- 24	AA		C	
VCQYNU1HM104K	6- 9	AB		C	
VHDDSS131//-1	6- 55	AA		B	
//	6- 56	AA		B	
//	6- 57	AA		B	
//	6- 58	AA		B	
VHDDSS133HV-1	6- 52	AA		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VHDDSS133HV-1	6- 53	AA		B	
//	6- 54	AA		B	
//	6- 60	AA		B	
//	6- 62	AA		B	
//	6- 63	AA		B	
VHDEU1Z////-1	6- 61	AB		B	
VHDRBA401//-1	6- 64	AE		B	
VHDRG2Y////-1	6- 59	AD		B	
VHEHZ15-2//-1	6- 235	AB		B	
//	6- 236	AB		B	
//	6- 237	AB		B	
//	6- 238	AB		B	
VHEHZ30L3//-1	6- 233	AA	N	B	
VHEHZ4C2///-1	6- 234	AB		B	
VHEHZ7A3///-1	6- 239	AB		B	
VHiiR2339//-1	6- 70	AG		B	
VHiLH2464-10C	6- 78	AR	N	C	
//	6- 79	AR	N	C	
VHiLH534G2L-1	6- 246	AX	N	B	
VHiLH534G6B-1	6- 247	AX	N	B	
VHiLH534G6L-1	6- 248	AX	N	B	
VHiMC1413P/-1	6- 72	AD		B	
//	6- 73	AD		B	
VHiM50734SP-1	6- 77	AW		B	
VHiM54532P/-1	6- 74	AU		B	
VHiSi3050CA-1	6- 69	AH	N	B	
VHiT51832SL10	6- 75	AX		B	
VHiT74LS09/-C	6- 71	AD		B	
VHiULN2003A-1	6- 72	AN		B	
//	6- 73	AN		B	
VHiUPD72068GP	6- 81	AY	N	B	
VHi65027GD051	6- 76	AW	N	C	
VRD-RC2EY102J	6- 148	AA		C	
//	6- 164	AA		C	
//	6- 165	AA		C	
//	6- 178	AA		C	
//	6- 179	AA		C	
//	6- 186	AA		C	
//	6- 187	AA		C	
//	6- 188	AA		C	
//	6- 194	AA		C	
//	6- 196	AA		C	
//	6- 197	AA		C	
//	6- 205	AA		C	
//	6- 219	AA		C	
VRD-RC2EY103J	6- 145	AA		C	
//	6- 146	AA		C	
//	6- 151	AA		C	
//	6- 152	AA		C	
//	6- 155	AA		C	
//	6- 163	AA		C	
//	6- 168	AA		C	
//	6- 175	AA		C	
//	6- 176	AA		C	
//	6- 177	AA		C	
//	6- 184	AA		C	
//	6- 198	AA		C	
//	6- 200	AA		C	
//	6- 201	AA		C	
//	6- 216	AA		C	
//	6- 217	AA		C	
//	6- 218	AA		C	
//	6- 222	AA		C	
VRD-RC2EY104J	6- 180	AA		C	
//	6- 182	AA		C	
//	6- 206	AA		C	
//	6- 207	AA		C	
VRD-RC2EY105J	6- 209	AA		C	
//	8- 6	AA		C	
VRD-RC2EY121J	6- 160	AA		C	
VRD-RC2EY122J	6- 157	AA		C	
//	6- 162	AA		C	
VRD-RC2EY204J	6- 220	AA		C	
VRD-RC2EY220J	6- 169	AA		C	
VRD-RC2EY221J	6- 192	AA		C	
VRD-RC2EY222G	6- 210	AA		C	
VRD-RC2EY222J	6- 149	AA		C	
//	6- 173	AA		C	
VRD-RC2EY273J	6- 221	AA		C	
VRD-RC2EY331G	6- 208	AA	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VRD-RC2EY331G	6- 223	AA	N	C	
VRD-RC2EY361J	6- 166	AA		C	
VRD-RC2EY362J	6- 158	AA		C	
VRD-RC2EY471J	6- 191	AA		C	
VRD-RC2EY472J	6- 159	AA		C	
//	6- 161	AA		C	
//	6- 181	AA		C	
//	6- 185	AA		C	
//	6- 195	AA		C	
//	6- 203	AA		C	
//	6- 204	AA		C	
VRD-RC2EY473J	6- 147	AA		C	
//	6- 150	AA		C	
//	6- 153	AA		C	
//	6- 154	AA		C	
//	6- 156	AA		C	
//	6- 202	AA		C	
//	6- 211	AA		C	
//	6- 212	AA		C	
//	6- 213	AA		C	
//	6- 214	AA		C	
//	6- 215	AA		C	
VRD-RC2EY752J	6- 174	AA		C	
VRD-RC2EY821J	6- 167	AA		C	
VRS-HT3AA220J	6- 170	AA		C	
//	6- 171	AA		C	
//	6- 172	AA		C	
VRS-HT3DA151J	6- 183	AA		C	
//	6- 189	AA		C	
//	6- 193	AA		C	
//	6- 199	AA		C	
VRS-HT3DA152J	6- 190	AA	N	C	
VSDSA001-B/-1	6- 124	AA		B	
//	6- 130	AA		B	
//	6- 133	AA		B	
//	6- 136	AA		B	
VSDSC001-//-1	6- 123	AA		B	
//	6- 125	AA		B	
//	6- 126	AA		B	
//	6- 127	AA		B	
//	6- 128	AA		B	
//	6- 129	AA		B	
//	6- 131	AA		B	
//	6- 132	AA		B	
//	6- 139	AA		B	
//	6- 141	AA		B	
//	6- 144	AA		B	
VS2SA1282-/-1	6- 137	AC		B	
//	6- 138	AC		B	
//	6- 142	AC		B	
//	6- 143	AC		B	
VS2SA673A//-1	6- 134	AD		B	
VS2SC3691-KLC	6- 135	AG	N	B	
VS2SD1145-FGC	6- 140	AD		B	
【X】					
XBPBZ40P06K00	1-B25	AA		C	
XBPSD20P10000	3-B07	AA		C	
XBPSD30P04000	1-B11	AA		C	
//	1-B12	AA		C	
//	1-B13	AA		C	
//	1-B14	AA		C	
XBPSD30P06KS0	3-B04	AA		C	
XBPSD30P16000	3-B09	AA		C	
XCPSD30P06000	3-B02	AA		C	
//	3-B03	AA		C	
XHPSD30P05000	3-B05	AA		C	
//	3-B06	AA		C	
XHPSD30P08000	6- 244	AA		C	
XHPSD30P10000	3-B08	AA		C	
XRESJ15-04000	4-E02	AA		C	
XRESJ20-04000	4-E04	AA		C	
XRESJ30-06000	4-E01	AA		C	
//	4-E03	AA		C	
XUBSD30P08000	1-B30	AA		C	
//	1-B31	AA		C	
//	2-B01	AA		C	
//	2-B02	AA		C	
//	2-B03	AA		C	
//	2-B04	AA		C	
XUBSD30P12000	1-B19	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
XUBSD30P12000	1-B20	AA		C	
XUPSD30P06000	1-B29	AA		C	
//	2-B05	AA		C	
//	2-B06	AA		C	
//	2-B07	AA		C	
//	2-B08	AA		C	
//	2-B09	AA		C	
XUPSD30P08000	1-B05	AA		C	
//	1-B06	AA		C	
//	1-B07	AA		C	
//	1-B08	AA		C	
//	1-B09	AA		C	
//	1-B10	AA		C	
//	1-B26	AA		C	
//	1-B27	AA		C	
//	1-B28	AA		C	
//	4-B01	AA		C	
//	4-B02	AA		C	
//	4-B10	AA		C	
XUPSD40P12000	1-B21	AA		C	
//	1-B22	AA		C	
//	3-B10	AA		C	
XUPSD40P14000	1-B15	AA		C	
//	1-B16	AA		C	
XUPSD40P16000	1-B17	AA		C	
//	1-B18	AA		C	
XWHSD40-05080	2-W01	AA		C	
XXXSP40L05000	3-B01	AA		C	
【0】					
0EN1012-0951/	9- 13	AA		C	
0EN8210-0004/	9- 3	AA		C	
0EN8210-0009/	9- 9	AC		C	
0EN8210-0015/	9- 1	AB		C	
0EN8210-0020/	9- 2	AB		C	
0EN8250-0019/	9- 12	AR	N	C	
0EN8330-0021/	9- 4	AA		C	
0EN8330-0024/	9- 10	AA		C	
0EN8330-0047/	9- 7	AA	N	C	
0EN8350-0234/	9- 6	AA		C	
0EN8350-0285/	9- 8	AA	N	C	
0EN8370-0182/	9- 5	AR	N	C	
0EN840C1-001/	10- 1	AC	N	C	
0EN840C1-002/	10- 2	AC	N	C	
0EN840C1-003/	10- 3	AC	N	C	
0EN840C1-004/	10- 4	AC	N	C	
0EN840C1-005/	10- 5	AC	N	C	
0EN840C1-006/	10- 6	AC	N	C	
0EN840C1-007/	10- 7	AC	N	C	
0EN840C1-008/	10- 8	AC	N	C	
0EN840C1-009/	10- 9	AC	N	C	
0EN840C1-010/	10- 10	AC	N	C	
0EN840C1-011/	10- 11	AC	N	C	
0EN840C1-012/	10- 12	AC	N	C	
0EN840C1-013/	10- 13	AC	N	C	
0EN840C1-014/	10- 14	AC	N	C	
0EN840C1-015/	10- 15	AD	N	C	
0EN840C1-016/	10- 16	AC	N	C	
0EN840C1-017/	10- 17	AC	N	C	
0EN840C1-018/	10- 18	AC	N	C	
0EN840C1-019/	10- 19	AC	N	C	
0EN840C1-020/	10- 20	AC	N	C	
0EN840C1-021/	10- 21	AC	N	C	
0EN840C1-022/	10- 22	AC	N	C	
0EN840C1-023/	10- 23	AC	N	C	
0EN840C1-024/	10- 24	AC	N	C	
0EN840C1-025/	10- 25	AC	N	C	
0EN840C1-026/	10- 26	AC	N	C	
0EN840C1-027/	10- 27	AC	N	C	
0EN840C1-028/	10- 28	AC	N	C	
0EN840C1-029/	10- 29	AD	N	C	
0EN840C1-030/	10- 30	AD	N	C	
0EN840C1-031/	10- 31	AD	N	C	
0EN840C1-032/	10- 32	AD	N	C	
0EN840C1-033/	10- 33	AE	N	C	
0EN840C1-034/	10- 34	AC	N	C	
0EN840C1-035/	10- 35	AD	N	C	
0EN840C1-036/	10- 36	AC	N	C	
0EN840C1-037/	10- 37	AC	N	C	
0EN840C1-038/	10- 38	AC	N	C	
0EN840C1-039/	10- 39	AC	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0EN840C1-040/	10- 40	AD	N	C	
0EN840C1-041/	10- 41	AD	N	C	
0EN840C1-042/	10- 42	AC	N	C	
0EN840C1-043/	10- 43	AD	N	C	
0EN840C1-044/	10- 44	AC	N	C	
0EN840C1-045/	10- 45	AG	N	C	
0EN840C1-046/	10- 46	AE	N	C	
0EN840C1-047/	10- 47	AC	N	C	
0EN840C1-048/	10- 48	AD	N	C	
0EN840C1-049/	10- 49	AC	N	C	
0EN840C1-050/	10- 50	AD	N	C	
0EN840C1-051/	10- 51	AC	N	C	
0EN840C1-052/	10- 52	AD	N	C	
0EN840C1-053/	10- 53	AC	N	C	
0EN840C1-054/	10- 54	AD	N	C	
0EN840C1-055/	10- 55	AD	N	C	
0EN840C1-056/	10- 56	AD	N	C	
0EN840C1-057/	10- 57	AD	N	C	
0EN840C1-058/	10- 58	AC	N	C	
0EN840C1-059/	10- 59	AC	N	C	
0EN840C1-060/	10- 60	AD	N	C	
0EN840C1-061/	10- 61	AD	N	C	
0EN840C1-062/	10- 62	AC	N	C	
0EN840C1-063/	10- 63	AD	N	C	
0EN840C1-064/	10- 64	AC	N	C	
0EN840C1-065/	10- 65	AC	N	C	
0EN840C1-066/	10- 66	AD	N	C	
0EN840C1-067/	10- 67	AC	N	C	
0EN840C1-068/	10- 68	AD	N	C	
0EN840C1-069/	10- 69	AC	N	C	
0EN840C1-070/	10- 70	AC	N	C	
0EN840C1-071/	10- 71	AC	N	C	
0EN840C1-072/	10- 72	AC	N	C	
0EN840C1-073/	10- 73	AC	N	C	
0EN840C1-074/	10- 74	AD	N	C	
0EN840C1-075/	10- 75	AE	N	C	
0EN840C1-076/	10- 76	AC	N	C	
0EN840C1-077/	10- 77	AE	N	C	
0EN840C1-078/	10- 78	AD	N	C	
0EN840C1-079/	10- 79	AD	N	C	
0EN840F4-001/	13- 1	AC	N	C	
0EN840F4-002/	13- 2	AC	N	C	
0EN840F4-003/	13- 3	AC	N	C	
0EN840F4-004/	13- 4	AC	N	C	
0EN840F4-005/	13- 5	AC	N	C	
0EN840F4-006/	13- 6	AC	N	C	
0EN840F4-007/	13- 7	AC	N	C	
0EN840F4-008/	13- 8	AC	N	C	
0EN840F4-009/	13- 9	AC	N	C	
0EN840F4-010/	13- 10	AC	N	C	
0EN840F4-011/	13- 11	AC	N	C	
0EN840F4-012/	13- 12	AC	N	C	
0EN840F4-013/	13- 13	AC	N	C	
0EN840F4-014/	13- 14	AC	N	C	
0EN840F4-015/	13- 15	AD	N	C	
0EN840F4-016/	13- 16	AC	N	C	
0EN840F4-017/	13- 17	AC	N	C	
0EN840F4-018/	13- 18	AC	N	C	
0EN840F4-019/	13- 19	AC	N	C	
0EN840F4-020/	13- 20	AC	N	C	
0EN840F4-021/	13- 21	AC	N	C	
0EN840F4-022/	13- 22	AC	N	C	
0EN840F4-023/	13- 23	AC	N	C	
0EN840F4-024/	13- 24	AC	N	C	
0EN840F4-025/	13- 25	AC	N	C	
0EN840F4-026/	13- 26	AC	N	C	
0EN840F4-027/	13- 27	AC	N	C	
0EN840F4-028/	13- 28	AC	N	C	
0EN840F4-029/	13- 29	AD	N	C	
0EN840F4-030/	13- 30	AD	N	C	
0EN840F4-031/	13- 31	AD	N	C	
0EN840F4-032/	13- 32	AD	N	C	
0EN840F4-033/	13- 33	AE	N	C	
0EN840F4-034/	13- 34	AC	N	C	
0EN840F4-035/	13- 35	AD	N	C	
0EN840F4-036/	13- 36	AC	N	C	
0EN840F4-037/	13- 37	AC	N	C	
0EN840F4-038/	13- 38	AC	N	C	
0EN840F4-039/	13- 39	AC	N	C	
0EN840F4-040/	13- 40	AD	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0EN840F4-041/	13- 41	AD	N	C	
0EN840F4-042/	13- 42	AC	N	C	
0EN840F4-043/	13- 43	AD	N	C	
0EN840F4-044/	13- 44	AC	N	C	
0EN840F4-045/	13- 45	AG	N	C	
0EN840F4-046/	13- 46	AE	N	C	
0EN840F4-047/	13- 47	AC	N	C	
0EN840F4-048/	13- 48	AD	N	C	
0EN840F4-049/	13- 49	AC	N	C	
0EN840F4-050/	13- 50	AD	N	C	
0EN840F4-051/	13- 51	AC	N	C	
0EN840F4-052/	13- 52	AD	N	C	
0EN840F4-053/	13- 53	AC	N	C	
0EN840F4-054/	13- 54	AD	N	C	
0EN840F4-055/	13- 55	AD	N	C	
0EN840F4-056/	13- 56	AD	N	C	
0EN840F4-057/	13- 57	AD	N	C	
0EN840F4-058/	13- 58	AC	N	C	
0EN840F4-059/	13- 59	AC	N	C	
0EN840F4-060/	13- 60	AD	N	C	
0EN840F4-061/	13- 61	AD	N	C	
0EN840F4-062/	13- 62	AC	N	C	
0EN840F4-063/	13- 63	AD	N	C	
0EN840F4-064/	13- 64	AC	N	C	
0EN840F4-065/	13- 65	AC	N	C	
0EN840F4-066/	13- 66	AD	N	C	
0EN840F4-067/	13- 67	AC	N	C	
0EN840F4-068/	13- 68	AD	N	C	
0EN840F4-069/	13- 69	AC	N	C	
0EN840F4-070/	13- 70	AC	N	C	
0EN840F4-071/	13- 71	AC	N	C	
0EN840F4-072/	13- 72	AC	N	C	
0EN840F4-073/	13- 73	AC	N	C	
0EN840F4-074/	13- 74	AD	N	C	
0EN840F4-075/	13- 75	AE	N	C	
0EN840F4-076/	13- 76	AC	N	C	
0EN840F4-077/	13- 77	AE	N	C	
0EN840F4-078/	13- 78	AD	N	C	
0EN840F4-079/	13- 79	AD	N	C	
0EN841C1-001/	12- 1	AC	N	C	
0EN841C1-002/	12- 2	AC	N	C	
0EN841C1-003/	12- 3	AC	N	C	
0EN841C1-004/	12- 4	AC	N	C	
0EN841C1-005/	12- 5	AC	N	C	
0EN841C1-006/	12- 6	AC	N	C	
0EN841C1-007/	12- 7	AC	N	C	
0EN841C1-008/	12- 8	AC	N	C	
0EN841C1-009/	12- 9	AC	N	C	
0EN841C1-010/	12- 10	AC	N	C	
0EN841C1-011/	12- 11	AC	N	C	
0EN841C1-012/	12- 12	AC	N	C	
0EN841C1-013/	12- 13	AC	N	C	
0EN841C1-014/	12- 14	AC	N	C	
0EN841C1-015/	12- 15	AD	N	C	
0EN841C1-016/	12- 16	AC	N	C	
0EN841C1-017/	12- 17	AC	N	C	
0EN841C1-018/	12- 18	AC	N	C	
0EN841C1-019/	12- 19	AC	N	C	
0EN841C1-020/	12- 20	AC	N	C	
0EN841C1-021/	12- 21	AC	N	C	
0EN841C1-022/	12- 22	AC	N	C	
0EN841C1-023/	12- 23	AC	N	C	
0EN841C1-024/	12- 24	AC	N	C	
0EN841C1-025/	12- 25	AC	N	C	
0EN841C1-026/	12- 26	AC	N	C	
0EN841C1-027/	12- 27	AC	N	C	
0EN841C1-028/	12- 28	AC	N	C	
0EN841C1-029/	12- 29	AD	N	C	
0EN841C1-030/	12- 30	AD	N	C	
0EN841C1-031/	12- 31	AD	N	C	
0EN841C1-032/	12- 32	AD	N	C	
0EN841C1-033/	12- 33	AE	N	C	
0EN841C1-034/	12- 34	AC	N	C	
0EN841C1-035/	12- 35	AD	N	C	
0EN841C1-036/	12- 36	AC	N	C	
0EN841C1-037/	12- 37	AC	N	C	
0EN841C1-038/	12- 38	AC	N	C	
0EN841C1-039/	12- 39	AC	N	C	
0EN841C1-040/	12- 40	AD	N	C	
0EN841C1-041/	12- 41	AD	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0EN841C1-042/	12- 42	AC	N	C	
0EN841C1-043/	12- 43	AD	N	C	
0EN841C1-044/	12- 44	AC	N	C	
0EN841C1-045/	12- 45	AG	N	C	
0EN841C1-046/	12- 46	AE	N	C	
0EN841C1-047/	12- 47	AC	N	C	
0EN841C1-048/	12- 48	AD	N	C	
0EN841C1-049/	12- 49	AC	N	C	
0EN841C1-050/	12- 50	AD	N	C	
0EN841C1-051/	12- 51	AC	N	C	
0EN841C1-052/	12- 52	AD	N	C	
0EN841C1-053/	12- 53	AC	N	C	
0EN841C1-054/	12- 54	AD	N	C	
0EN841C1-055/	12- 55	AD	N	C	
0EN841C1-056/	12- 56	AD	N	C	
0EN841C1-057/	12- 57	AD	N	C	
0EN841C1-058/	12- 58	AC	N	C	
0EN841C1-059/	12- 59	AC	N	C	
0EN841C1-060/	12- 60	AD	N	C	
0EN841C1-061/	12- 61	AD	N	C	
0EN841C1-062/	12- 62	AC	N	C	
0EN841C1-063/	12- 63	AD	N	C	
0EN841C1-064/	12- 64	AC	N	C	
0EN841C1-065/	12- 65	AC	N	C	
0EN841C1-066/	12- 66	AD	N	C	
0EN841C1-067/	12- 67	AC	N	C	
0EN841C1-068/	12- 68	AD	N	C	
0EN841C1-069/	12- 69	AC	N	C	
0EN841C1-070/	12- 70	AC	N	C	
0EN841C1-071/	12- 71	AC	N	C	
0EN841C1-072/	12- 72	AC	N	C	
0EN841C1-073/	12- 73	AC	N	C	
0EN841C1-074/	12- 74	AD	N	C	
0EN841C1-075/	12- 75	AE	N	C	
0EN841C1-076/	12- 76	AC	N	C	
0EN841C1-077/	12- 77	AE	N	C	
0EN841C1-078/	12- 78	AD	N	C	
0EN841C1-079/	12- 79	AD	N	C	
0EN842C1-001/	11- 1	AC	N	C	
0EN842C1-002/	11- 2	AC	N	C	
0EN842C1-003/	11- 3	AC	N	C	
0EN842C1-004/	11- 4	AC	N	C	
0EN842C1-005/	11- 5	AC	N	C	
0EN842C1-006/	11- 6	AC	N	C	
0EN842C1-007/	11- 7	AC	N	C	
0EN842C1-008/	11- 8	AC	N	C	
0EN842C1-009/	11- 9	AC	N	C	
0EN842C1-010/	11- 10	AC	N	C	
0EN842C1-011/	11- 11	AC	N	C	
0EN842C1-012/	11- 12	AC	N	C	
0EN842C1-013/	11- 13	AC	N	C	
0EN842C1-014/	11- 14	AC	N	C	
0EN842C1-015/	11- 15	AD	N	C	
0EN842C1-016/	11- 16	AC	N	C	
0EN842C1-017/	11- 17	AC	N	C	
0EN842C1-018/	11- 18	AC	N	C	
0EN842C1-019/	11- 19	AC	N	C	
0EN842C1-020/	11- 20	AC	N	C	
0EN842C1-021/	11- 21	AC	N	C	
0EN842C1-022/	11- 22	AC	N	C	
0EN842C1-023/	11- 23	AC	N	C	
0EN842C1-024/	11- 24	AC	N	C	
0EN842C1-025/	11- 25	AC	N	C	
0EN842C1-026/	11- 26	AC	N	C	
0EN842C1-027/	11- 27	AC	N	C	
0EN842C1-028/	11- 28	AC	N	C	
0EN842C1-029/	11- 29	AD	N	C	
0EN842C1-030/	11- 30	AD	N	C	
0EN842C1-031/	11- 31	AD	N	C	
0EN842C1-032/	11- 32	AD	N	C	
0EN842C1-033/	11- 33	AE	N	C	
0EN842C1-034/	11- 34	AC	N	C	
0EN842C1-035/	11- 35	AD	N	C	
0EN842C1-036/	11- 36	AC	N	C	
0EN842C1-037/	11- 37	AC	N	C	
0EN842C1-038/	11- 38	AC	N	C	
0EN842C1-039/	11- 39	AC	N	C	
0EN842C1-040/	11- 40	AD	N	C	
0EN842C1-041/	11- 41	AD	N	C	
0EN842C1-042/	11- 42	AC	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0EN842C1-043/	11- 43	AD	N	C	
0EN842C1-044/	11- 44	AC	N	C	
0EN842C1-045/	11- 45	AG	N	C	
0EN842C1-046/	11- 46	AE	N	C	
0EN842C1-047/	11- 47	AC	N	C	
0EN842C1-048/	11- 48	AD	N	C	
0EN842C1-049/	11- 49	AC	N	C	
0EN842C1-050/	11- 50	AD	N	C	
0EN842C1-051/	11- 51	AC	N	C	
0EN842C1-052/	11- 52	AD	N	C	
0EN842C1-053/	11- 53	AC	N	C	
0EN842C1-054/	11- 54	AD	N	C	
0EN842C1-055/	11- 55	AD	N	C	
0EN842C1-056/	11- 56	AD	N	C	
0EN842C1-057/	11- 57	AD	N	C	
0EN842C1-058/	11- 58	AC	N	C	
0EN842C1-059/	11- 59	AC	N	C	
0EN842C1-060/	11- 60	AD	N	C	
0EN842C1-061/	11- 61	AD	N	C	
0EN842C1-062/	11- 62	AC	N	C	
0EN842C1-063/	11- 63	AD	N	C	
0EN842C1-064/	11- 64	AC	N	C	
0EN842C1-065/	11- 65	AC	N	C	
0EN842C1-066/	11- 66	AD	N	C	
0EN842C1-067/	11- 67	AC	N	C	
0EN842C1-068/	11- 68	AD	N	C	
0EN842C1-069/	11- 69	AC	N	C	
0EN842C1-070/	11- 70	AC	N	C	
0EN842C1-071/	11- 71	AC	N	C	
0EN842C1-072/	11- 72	AC	N	C	
0EN842C1-073/	11- 73	AC	N	C	
0EN842C1-074/	11- 74	AD	N	C	
0EN842C1-075/	11- 75	AE	N	C	
0EN842C1-076/	11- 76	AC	N	C	
0EN842C1-077/	11- 77	AE	N	C	
0EN842C1-078/	11- 78	AD	N	C	
0EN842C1-079/	11- 79	AD	N	C	
0EN8770-0013/	9- 11	AW	N	C	